

NOTES ON THE TRAINING, EQUIPMENT, AND ORGANISATION OF CAVALRY FOR WAR

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LONDON

WILLIAM CLOWES AND SONS, LIMITED

23, COCKSPUR STREET, S.W.

1910

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PRINTED BY
WILLIAM CLOWES AND SONS, LIMITED,
LONDON AND BECCLES.



26.7.84

PREFACE

A SERVICE extending over twenty-nine years, the greater part of which has been spent in the Cavalry branch, has caused me to make many notes, mental and otherwise, on the mode of employment and working of this arm.

Although our "Cavalry Training" and "Field Service Regulations" are probably as sound and useful as any in the world, they leave a good deal to the imagination, especially as regards the methods of putting into practice the principles which they expound.

The greater part of the notes contained in this volume are points to which I have had to call the attention of my own regiment; there are certain faults which seem to occur over and over again, and to be more or less common to all regiments. This, I think, must be the result of insufficient and vague explanation in the training manuals above referred to, and also of a want of imagination on the part of those who have to interpret them.

All officers are not equally capable of imparting knowledge, and it is in the hopes of being able to help such, and also with the object of doing what I can to increase the efficiency of what I firmly believe to be, bar none, the best cavalry in the world, that I have thought fit to publish the results of my experience with this arm.

THE AUTHOR.

LONDON,
June, 1910.

PUBLISHERS' NOTE

WHEREVER reference is made to General von Bernhardi, his book entitled "Cavalry in Future Wars" is the one referred to. While this work was going through the press a new book by General von Bernhardi, entitled "Cavalry in War and Peace," was brought out.

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NOTES ON THE TRAINING, EQUIPMENT, AND ORGANISATION OF CAVALRY FOR WAR.

CHAPTER I

THE DUTIES AND EMPLOYMENT OF CAVALRY IN WAR

BEFORE attempting to discuss the training and equipment of cavalry, it is necessary to have a clear idea as to the duties which cavalry will have to perform in war : what, in fact, will be expected of the cavalry.

It is usual to assert that the first, and, according to General Von Bernhardt,* the most important use to which modern cavalry will be put, is strategical reconnaissance ; that is to say, the despatch of a large force of independent cavalry to push on far ahead of the other arms with the object of ascertaining the numbers, dispositions, and movements of the opposing army. Before this object can be attained it will usually happen that the hostile cavalry must be encountered and defeated, as it will probably be engaged on a similar enterprise, and until it is defeated it will be impossible to continue the reconnaissance.

Strategical reconnaissance is really nothing more than what is called a reconnaissance-in-force ; the hostile screen of cavalry must be driven in, so as to admit of the smaller reconnoitring parties being able to continue their advance until they get in touch with the main bodies of the hostile forces. It seems certain that in the near future cavalry will be relieved of part at least of its reconnaissance work by flying machines, but the use of the latter is dependent on the weather and other considerations. The rapid development of flying machines on the Continent of Europe, encouraged in every possible way by the military

* "Cavalry in Future Wars." •

authorities, is a sure sign of the importance that is attached to their employment in war. It must, however, be borne in mind that both combatants can play the same game, and although flying machines may, under favourable conditions, obtain the required information, it is very doubtful whether the enemy's machines can be prevented from doing the same. The natural result to be expected is that each combatant will be acquainted with the movements of the other, the element of surprise will be to a considerable extent eliminated, and victory will more than ever depend on the preponderance of force which can be brought to bear on the battlefield; it will more than ever be a conflict of masses.

General Von Bernhardt would seem to imply that it is advantageous for the strategical cavalry to go out of its way to meet the opposing cavalry, as the advantages of destroying the latter in the early part of a war are obviously great.

Whether such a course of action is advisable or not is a matter of opinion, though there can be no doubt as to the desirability of wiping out the hostile cavalry on the first opportunity. The question at issue is whether the independent strategical cavalry will be successful?

To operate in a friendly country is an immense advantage. The independent cavalry of an invading force necessarily acts under the most adverse conditions; its patrols and smaller detachments are liable to capture and to be ambuscaded, it operates in a more or less unknown country, information of any kind will be withheld by the hostile inhabitants, and supplies will be difficult to procure, whilst the enemy will be kept fully informed of the movements of the invader.

It is not difficult to conceive that these disadvantages might more than equalise any slight advantage in numbers or efficiency on the part of the invading cavalry.

It would seem that there is only one factor to guide us in determining whether it is advisable to seek to bring the hostile cavalry to battle, viz. whether the chances of success justify us in so doing. To quote our "Field Service Regulations," "Troops should never be committed to a general engagement unless such action is fully justified by the prospect of success." It is always a mistake to underrate the enemy; our efforts should be devoted to the endeavour to take him at a disadvantage, but, if we attack him in his own territory, with a force of not greater strength than

his own, it is not improbable that we may find *ourselves* taken at a disadvantage.

A considerable superiority either in *morale*, numbers; or *organisation* will be needed to ensure success. The combatant which has the advantages above indicated will, no doubt, be keen to utilise his superiority, and will push forward his strategical cavalry, in addition to his airships, but in wars between the great Continental Powers it is doubtful whether either combatant would, at the outset, be sufficiently confident to risk the bulk of its cavalry to obtain information which might perhaps be obtained equally well by other means. Cavalry is an arm which, if once destroyed, cannot be quickly replaced; it takes three years to make a good cavalry soldier, and a great many more years to make good cavalry leaders. If the cavalry is practically obliterated in the early part of a war, the army of which it formed part will be at a great disadvantage.

As previously suggested, it may be possible to justify the risk incurred by strategical cavalry by superior organisation. We may have the advantage in *morale*, but the British army is never likely to have a superiority in numbers. It *can*, however, have its independent cavalry organised in such a way that it will be *really* independent; a highly mobile force, complete in all arms and in all departments, which will have a considerable advantage over strategical cavalry which is organised on the usual model. The proposed organisation will be considered more fully hereafter, but at present it is only necessary to emphasise the risk that is incurred by strategical cavalry; and the grave results that would follow if it were defeated.

It is not suggested that cavalry will no longer be employed with the object of gaining intelligence regarding the enemy; every possible means will be utilised, and cavalry is one of them, but the advent of the flying machine is likely to restrict the use of cavalry for *extended* reconnaissance. Cavalry is a costly arm, and, if the necessary information can be obtained by other means, the cavalry will be retained intact for other duties.

As climatic conditions may be unfavourable to the use of airships, and as the hostile patrols, and larger bodies, are sure to be actively seeking to gain information, it will in any case be necessary to screen the front of an army, and to take up a forward position with a view to supporting strategical patrols, or to reconnoitre in force should the airships be unable to play their part.

The mass of the available cavalry will therefore be well in front of the remainder of the army, but, unless circumstances are exceptionally favourable, its duties are likely to be more those of protective cavalry than of strategical cavalry; it will be more or less closely supported by the advanced guards of the infantry columns, and will consequently have the advantage of a hostile cavalry, which is unsupported by other troops.

Success in war depends on the results of the great battles, and battles are won by the *combined* action of all arms: masses of cavalry judiciously utilised may turn the tide of battle, and turn what would otherwise be a profitless success into a decisive victory.

It has been common for many years past to decry the utility of cavalry in a general engagement, but it is safe to predict that he who knows how to use his cavalry on the battlefield will have the opportunity of proving that it can still more than justify its existence; if well trained, well led, and properly handled, but not otherwise.

Cavalry armed with modern rifles, in addition to weapons suitable for shock tactics, has a power far in excess of that possessed by cavalry in the past: it has now the power of defence as well as offence, and its power of offence is doubled, as it can attack with cold steel or with the rifle.

Modern battles are greatly influenced by flanking attacks and turning movements, and it is in the execution of such operations that the cavalry will probably in future find its special sphere of action. Such operations can best be carried out by mobile troops; but such troops may have to operate at a distance from the remainder of their army. They must be independent of the main armies, but, nevertheless, they will be acting in combination with them to attain the common aim, viz., the defeat of the hostile army.

If this be so, it would seem inadvisable for any nation to risk the destruction of the bulk of its cavalry at the commencement of a war by sending it unsupported into hostile territory, unless, of course, it is in overwhelming numbers. It seems, therefore, more than probable that cavalry will in future be used less on independent enterprises, and so will work more in combination with the other arms.

The masses of cavalry covering the front of modern armies may, as previously pointed out, be in closer touch with those

armies than is usually contemplated by the advocates of strategical cavalry, but, although its rôle will at first be partially protective, it must be prepared to cut itself adrift from its supporting columns and become independent directly circumstances offer chances of success.

Owing to the enormous size of modern armies, and to their consequent dependence on railways for purposes of supply, it is not improbable that cavalry will occasionally be used for raids against important points on the hostile line of communications, but such operations are uncertain, and the results are often not commensurate with the risks incurred. It is difficult to draw the line between combined and independent duties. Turning movements on a large scale, and operations in the pursuit, both require an independent organisation, although they are really only part of the combined plan of operations. The cavalry, although probably widely separated from the other arms, will, in reality be working in combination with them. On the other hand, raids against the enemy's lines of communication, and strategical reconnaissance, are not so closely connected with the operations of the other arms, and are more truly independent.

In all the above cases the cavalry must be prepared to act on its own, without support from the marching columns of the army ; it should therefore be organised so as to be independent in the true sense of the word ; not only independent in the sense that it will be isolated, but independent in the sense that it will be complete in itself, and will want no support from the main army.

Just as the flying machine may assist, or sometimes even replace cavalry for strategical reconnaissance, so the balloon, or airship of any type, may assist cavalry in tactical reconnaissance, though it is not likely to be able to replace it. Early and accurate intelligence is so important that every possible means of getting it will be employed ; one will aid, but not replace, the other. For protective reconnaissance, especially on the line of march, airships are not likely to be of much assistance, and mobile troops are an absolute necessity.

The mobility of cavalry, combined with its power of acting on the defensive with the rifle, makes it specially suited for protecting the front, flanks, or rear of the force to which it is attached. It obtains early information of the point threatened and can move rapidly so as to interpose; and hold the enemy in check until the main body is prepared to meet the attack, or given the

opportunity of avoiding being drawn into battle against the intentions of the commander.

Nevertheless, the service of protection is a duty for which the use of cavalry is not indispensable ; it is a defensive duty, and the amount of reconnoitring required is limited. It therefore is feasible, to a certain extent, to utilise mounted infantry for this purpose, and so economise our cavalry, and reserve it for duties which cannot be performed by mounted infantry. It must be remembered that an active offensive is often the best means of protection. If the hostile cavalry can be driven from the theatre of operations, the service of protection will be much facilitated, but this end will not be accomplished by the use of mounted infantry alone. Cavalry can do all that mounted infantry can do, and a good deal more besides ; it can act either mounted or dismounted, by shock or fire, and a combination of both is the surest way of defeating the hostile cavalry.

If cavalry were sufficiently numerous, mounted infantry would be unnecessary, but, as cavalry is by no means numerous, it can with advantage be reinforced by mounted infantry, which is a cheaper and more easily raised arm, and the latter can set the cavalry free for its mounted rôle.

For purely local protection, and for the various minor duties which cavalry is frequently called upon to perform, mounted infantry can be used. The duties of divisional cavalry might be equally well performed by mounted infantry, and this arrangement would be equivalent to an augmentation of the strength of the cavalry. To drive the hostile cavalry from the field, every available cavalry man will be required ; concentration of force is of the first importance.

In an action the cavalry will be called upon to perform reconnoitring and protective duties on the flanks of an army, and it may, sooner or later, have to meet and check the enterprises of the hostile cavalry, but its main objective on the battlefield must be the hostile infantry. If the hostile infantry is beaten, the hostile guns and cavalry are of little further account : the former will have to retire or be captured, and the latter will not be able to withstand the combined advance of the victorious troops.

As hostile armies begin to come in contact with each other, the cavalry will have to clear the front, and will naturally find itself on the flanks of the army when ranged in order of battle. At first the cavalry may be more or less evenly distributed on both

flanks, but, as the plan of battle develops; one or other flank will probably be selected for the operations of the mass of the cavalry. As large a mobile force as possible will be concentrated with a view to offensive action, whilst only a small number will be left for reconnoitring duties on the other flank. Should the cavalry undertake a wide turning movement against the flanks and rear of the enemy, it will probably find itself engaged with troops which have not yet been in action, against which shock tactics would be of little avail. In such a case, the cavalry must have recourse to the rifle, so as to meet the enemy on equal terms; but when operating on the battlefield in closer combination with the other arms, it is by no means improbable that opportunities for mounted action may occur, as the enemy will be fully occupied with the troops in front of him.

The nervous stress of a modern battle will sooner or later reduce the infantry to a state of impotence; it will be incapable of further effort. Its strength and ammunition may be exhausted; it may be worn out by thirst, hunger, and privation, its ranks will be disordered, and its leaders killed or wounded. In all probability the infantry of both combatants will be equally distressed, but the commander who knows how to combine the action of all arms at his disposal, to seize the psychological moment and launch his cavalry to the attack, may reap a rich harvest of success.

All infantry is not perfect; even continental critics themselves admit that the short-service infantry of the present day is not in some respects what infantry was in the past; the large number of reserve men and recruits in the ranks, commanded in many cases by reserve officers, cannot be expected to be possessed of the same cohesion, either morally or tactically, as long-service infantry which has comparatively few reservists, or of cavalry, which is necessarily a long service arm, and which is practically kept up to war strength even in peace time. The extended formations which infantry is forced to adopt, owing to the annihilating effect of magazine rifles and quick-firing guns; lay it open to the danger of cavalry attacks to a far greater extent than has been the case in the past.

Men in extended formations are not under control, and the front of an extended line is swept by a comparatively small volume of fire compared to the front of a rank entire. The stopping power of the small bore bullet is insignificant compared to that of rifles used in the past; and although horses will be

hit they will still be capable of carrying their riders on to victory.

The extreme rapidity of fire attained by magazine rifles and quick-firing guns has the serious drawback of making the supply of ammunition a most difficult matter, and there is little doubt that in spite of all that can be done, ammunition will at times run short, and thus give cavalry an opportunity.

It is true that cavalry offer a large target to infantry or artillery fire, and it has been proved in war that cavalry cannot expect to attack unshaken infantry with success, but if this infantry is already heavily engaged with other troops it is a different matter altogether.

During a battle it may be found necessary to attack hostile artillery with a view to relieving pressure on the infantry. It will seldom be possible for cavalry to carry off hostile guns, but it may be possible to cause them to temporarily cease firing, or even to disable them.

A frontal attack on artillery in position offers poor chances of success, but it may be possible to surprise the guns, or to attack them simultaneously from several directions. Guns cannot fire in every direction at the same time, and the covered positions of artillery, using indirect fire, favour a cavalry attack considerably.

Cavalry held in reserve on the battlefield can be utilised on the defensive to reinforce quickly any portion of the line, or to prolong the line of battle, and prevent the flanks being turned; on the offensive it can be used to seize positions outflanking those held by the enemy, and to threaten his line of retreat, and, finally, it is the chief weapon in the hands of a commander for the pursuit: a victory is only half a victory unless the defeated troops are vigorously pursued, and for this purpose cavalry is indispensable.

A retreating army will always cover its retirement by a rear guard, probably composed of all arms, which will take advantage of all defiles to make a stand and check the pursuer.

Unless the country is exceptionally favourable, the direct pursuit does not offer much prospect of decisive results. It will generally be better to leave the direct pursuit to the other arms, and to employ the cavalry for what is called the pursuit on parallel lines. By pushing on parallel to the enemy's line of retreat, more or less wide on a flank, the hostile rear guard will

be outflanked, and opportunities are likely to be found for harassing the main columns in flank, probably by fire action; it may even be possible to forestall the enemy at some river line or defile, the possession of which will cut off his line of retreat, and possibly even bring about his capitulation.

Cavalry may, and often will, be pushed on ahead of the infantry divisions to seize and hold important positions until the infantry can come up, and in a retreat the action of cavalry is most important. For rear-guard work cavalry is particularly useful, as it can hold positions to delay the enemy, and then slip away, without serious loss, in a manner which is quite impossible for infantry. Not only is cavalry required for actual rear-guard duties, but it will also be employed on the flanks of the line of retirement, to hold in check the mobile troops of the pursuer, who are certain to be working round the flanks of the retiring army.

The maintenance of inter-communication and transmission of intelligence is a duty which in the past has fallen chiefly to the lot of cavalry, but in the future motor cars, flying machines, wireless telegraphy, and telephones are likely to be largely employed, though for short distances the use of mounted men will still be necessary. It is, however, at least open to doubt whether it would not be better to specialise this service by having specially enlisted corps of despatch riders. Such an arrangement would probably considerably facilitate the working of this very important duty, and the system suggested would have the further advantage of freeing the cavalry for its own legitimate work. It is not meant that such despatch riders should be used by cavalry to bring in its reports, but only that a corps of despatch riders should be maintained in order that it may be utilised with the headquarters of armies, corps, divisions, and brigades for keeping up inter-communication and carrying despatches.

Such a corps might very easily be raised on the Volunteer or Territorial basis. All that would be required would be to select active men, of high intelligence, who have been in the habit of riding to hounds. They should carry no arms, except a revolver, so that they would ride light, and but little training would be necessary if the right stamp of man was enlisted.

From the foregoing it appears that the essential matters in which cavalry must be trained are as follows:—

(a) Reconnaissance, strategical, tactical, and protective.

- (b) Protection, on the line of march and in camp.
- (c) Shock action, against cavalry, artillery, and infantry.
- (d) Dismounted action, defensive and offensive.

From a consideration of the duties of cavalry previously enumerated, it would seem most desirable that cavalry should be specially trained to act with equal facility on foot or mounted. In the majority of European armies there is a tendency to train cavalry chiefly with a view to shock action against hostile cavalry, and to neglect other, and probably equally important, duties.

Shock tactics against hostile cavalry are only possible when the country is favourable, but a favourable country means an open country which is also favourable to the employment of the hostile horse artillery. It will be found extremely difficult to bring up a large body of cavalry to within striking distance of the enemy without exposing it to artillery fire, and it therefore seems probable that purely cavalry actions (mounted) will be of infrequent occurrence. Cavalry must, of course, be trained to meet hostile cavalry with cold steel, but cavalry actions are likely in the future to be won by a judicious combination of shock and fire tactics, and it therefore seems undesirable to specialise the training of cavalry too much in the matter of the attack against cavalry. The cavalry leader who can rightly and quickly decide when to use shock tactics, or when to fight on foot, will undoubtedly come out top in war time. There have been periods when shock tactics were the rage, and periods when mounted infantry tactics were the fashion, but unfortunately one or the other has always been run to death.

The truth seems to be that both are right if employed at the right time. It is a mere matter of opportunity; but the results are apt to be disastrous if shock tactics are employed under unsuitable circumstances, and, on the other hand, great opportunities may be lost by dismounting to fire when the occasion is suitable for shock action.

In almost all its important *rôles*, it appears absolutely necessary that cavalry should have a thoroughly independent organisation; or, in other words, that it should be rendered as powerful as possible, by giving it extra facilities for employing fire in combination with shock action, and to augment its numbers by arranging for mounted infantry and despatch riders to perform duties for which the use of cavalry is not indispensable. To produce decisive results, cavalry must be used in masses, and these masses

will not be available unless special arrangements are made to economise what cavalry we possess, and if the bulk of the cavalry is used recklessly in minor combats at the commencement of a war.

Efficient cavalry will be able to perform its rôle in war if handled by officers who have a sound knowledge of the possibilities and limitations of the arm, who are imbued with the cavalry spirit, and who have had the opportunity of learning how to command.

It has been said that cavalry leaders "are born not made," but this is only true in so far that some individuals have certain natural gifts which fit them for the command of cavalry above their fellows; practice is as necessary as in any other walk of life. There can be no doubt that cavalry, however well trained in its actual duties, will not give a good account of itself in war unless handled by officers who have deeply studied their profession; and unless the chief commanders are experienced, as well as able, bold, and energetic.

It seems, then, that in addition to the actual training of the troops, the most important requirement for war is the training of the higher leaders. Most officers get a certain experience of command in the handling of squadrons or regiments, but when they have got so far they get few opportunities of perfecting themselves in any higher capacity, and, if they eventually find themselves in command of larger bodies, they have to rely entirely on their general knowledge of the art of war, and on their natural capabilities as cavalry leaders, whereas, if they had experience as well, they would stand a much better chance of success.

It must be recognised that cavalry itself is but the weapon; and the leader must be trained to wield this weapon to the best advantage. It is the man behind the gun that wins battles; not the gun itself, however perfect and up-to-date it may be!

CHAPTER II

RECONNAISSANCE

RECONNAISSANCE is a term used to describe the methods usually employed for the systematic collection of intelligence regarding the enemy, or of the ground in so far as it affects the military operations in hand. The actual work of observation is carried out by scouts, who are supported, more or less closely according to circumstances, by patrols, squadrons, or larger units, and these supporting units arrange for the immediate transmission of the information obtained by the scouts.

There seems a tendency to mix up reconnoitring duties with screening duties, probably due to the fact that what is called protective reconnaissance is really not reconnaissance, but is more of the nature of protection, or screening, than of reconnaissance. Although in all protective operations scouts must be employed to feel the way, it is not their duty to go out of their way to look for the enemy. In a reconnaissance proper, the movements of the scouts, and of the bodies supporting them, are dependent on the movements of the enemy; they must seek the enemy out, obtain contact with him, and, having done so, remain in touch with him; whilst in protective duties, the scouts, and the supporting patrols or other bodies, are tied down to keep contact with the unit which they are protecting, and cannot go out of their way to seek for the enemy. In almost every reconnaissance separate units must be detailed for the true reconnoitring duties and for the protective or screening duties, and there must be no mixing up of these duties. Every patrol must distinctly understand whether it is for reconnoitring or for protection. As there seems to be a good deal of confusion on the subject, it may not perhaps be out of place to attempt to classify the different kinds of patrols which are usually employed and to briefly indicate their duties.

I. Reconnoitring patrols, independent and often totally unsupported, which are sent out under direct instructions from commanders, or their staff officers, and report direct to the authority from whom they have received orders; such patrols will always be given some definite objective, will be told exactly what information is required, and they will carry out their mission as best they can. Such patrols may be strategical or tactical, according to the nature of the duty they are called upon to perform. In the case of strategical patrols, *i.e.* patrols which are sent long distances and are totally unsupported, the required information can usually only be obtained by secrecy, by avoiding observation, and by stratagem.

Tactical patrols are more or less of the same nature, but they have not to go so far away from the supporting troops. These tactical patrols are often called "Contact" patrols, because they are usually sent out with the object of getting in contact with the enemy.

II. Protective patrols will be detailed by commanders for purely protective duties, such as the advanced parties of an advanced guard or rear parties of a rear guard, flanking patrols, combat patrols, and the reconnoitring patrols of an outpost line. Patrols of this nature are supported by other units, their movements are restricted, they must retain touch with the units which they are screening, and, although they should not unnecessarily expose themselves to view, they cannot hope to altogether remain hidden, as they must conform to the movements of the main body. Moreover, such patrols have a double duty, *i.e.* limited reconnoitring and the protection of the body from which they are detached. They therefore will have to fight as well as to reconnoitre; this they can do, because they are within supporting distance of their own troops. They must not, however, seek to bring on a fight, but must only fight with the object of delaying the enemy's advance, or to drive back small hostile parties which may attempt to harass their main body. Their duties are defensive, not offensive, and the defensive arm of cavalry is the rifle, not the sabre.

As a general rule, all patrols should report direct to the officer who sends them out. For instance, a squadron, furnishing the vanguard of a small advanced guard of all arms, would detail protective patrols which would report direct to the squadron commander, the latter officer transmitting the information to

the advanced guard commander; but, should the advanced guard commander have himself sent out any tactical patrols, such patrols would report direct to the advanced guard commander, and not to the squadron from which they were furnished. This may at first sight appear rather a trifling matter, but in practice it is important, and all officers should bear in mind that if they expect to receive early information it is very necessary to arrange accordingly. For example, in the case of a brigade of cavalry moving in the vicinity of an enemy, if each regiment sends out combat patrols such patrols will, in the first instance, report to their own regimental commanders, and time will be wasted before the report reaches the brigadier, consequently it is a better plan for the brigadier to himself detail the protective troops, who should then report direct to him. Again, the tactical patrols sent out by a reconnoitring, or contact, squadron would report direct to the squadron commander, but any strategical patrols sent out by headquarters should report direct to headquarters.

In spite of this general rule, patrol commanders must exercise their discretion in this matter, as it may happen that the information is so important that it should be sent *direct* to the superior commander, as well as to the officer who sent the patrol out.

In protective reconnaissance, the superior commander should always himself make the necessary arrangements for protection, and should not leave such arrangements to inferiors; thus, in the case of a single regiment, the protective units, whether advanced or rear guards, flanking or combat patrols, should be given their orders by the regimental commander: the commander should not, as is often done, leave it to his squadron commanders to send out combat patrols or similar detachments.

It must not be supposed that because the brigadier has detailed the protective troops for his brigade, regimental commanders are thereby relieved of all responsibility; on the contrary, every unit should on its own initiative, when circumstances make it desirable, take its own precautions against surprise. For instance, in the case of a cavalry brigade marching in column of route, a regimental commander may see that the flank of his long column is inadequately guarded, and he consequently should make his own arrangements for protection, in addition to the brigade arrangements.

It has been previously pointed out that in almost every class of reconnaissance both reconnoitring and protective patrols are

required. Take the case of an advanced guard composed of all arms, the vanguard being furnished by cavalry: the vanguard commander would detail protective patrols to cover the front, but, in addition to these, reconnoitring patrols should be detailed to start some time before the advanced guard moves off, in such directions as may be considered necessary. These patrols should be sent out under the direct orders of the *advanced guard commander*, and not by the *vanguard commander*, and such flanking patrols, or other detachments as may be considered necessary, should also be sent out by the advanced guard commander. The advanced guard commander may, of course, delegate this duty to his cavalry commander by directing him to reconnoitre in such and such directions, but, if he keeps the arrangements for reconnaissance in his own hands, he should inform his cavalry commander what arrangements he is making, so as to avoid their arrangements clashing with each other. There is no more common occurrence at field days than to hear complaints that the cavalry have not sent in any information about the enemy; this is usually because the cavalry patrols are not given time to get on sufficiently far ahead of the remainder. Two opposing forces often rendezvous within a mile or two of each other, with instructions that there is to be no move before a certain hour.

The consequence is that the real reconnoitring patrols have no chance of getting on ahead, and the reconnoitring is therefore done by the protective patrols, with the result that the enemy usually comes in sight as soon as reports of his whereabouts begin to come in. Efficient reconnaissance cannot be expected on these lines. Information to be of real value must be forthcoming in good time, and this cannot be arranged unless patrols are far on in front of the remainder.

Reconnoitring patrols should generally send in written reports, but protective patrols should make use of verbal reports.

In the case of protective patrols which are at no great distance from the troops which they are protecting, it is, as a general rule, a mistake to attempt to *write* reports, as there is no time to spare if the information is to be of value. It is a common fault at manœuvres to see a patrol commander sitting down to write a report when there is not a minute to lose if the information is to reach the commander in time to be acted on. It is therefore most necessary to give the men plenty of practice in carrying verbal messages. As a preliminary exercise this can be done by

placing the men in small groups, at intervals of fifty yards or so, round the barrack-square, and passing a succession of messages from group to group. When the men have had a certain amount of instruction on the above lines, they should be similarly employed in the open country, mounted, and over longer distances. With these exercises it is possible to combine another, which is also of some importance; that is to say, teaching messengers to shout out the title of the person to whom a report is to be delivered, such as "G.O.C. First Cavalry Brigade," or "O.C. 13th Hussars."

Squadron commanders should teach *all* their men to scout; every man should be capable of scouting sufficiently well for protective reconnaissance, but, in addition, the regular scouts should receive further instruction with the object of making them fit for strategical and tactical scouting. To get the best results, it seems desirable that these scouts and despatch riders should be trained annually by a specially selected officer; squadron commanders have plenty of other things to do, and moreover every one is not possessed of the capacity for imparting knowledge, especially in this branch.

"Cavalry Training and Field Service Regulations," Part I., give some indications of the lines on which instruction in scouting is to be carried out. The selection and training of scouts is an important matter: the first requisite in selecting scouts or despatch riders is intelligence, but it must be combined with activity, energy, and self-reliance. The scout should also be a good rider, and not a heavy-weight.

It is a sound plan to select scouts from those men who are likely to be promoted.

If scouting duties are made a sort of stepping stone to promotion, it will, to a certain extent, tend to encourage scouts to do their best, and afterwards an N.C.O. will be all the better for his experiences as a scout. Scouts and despatch riders should be reselected annually, and any man who does not come up to the mark eliminated. New men should be selected to fill vacancies caused by the promotion of any of the scouts, and the remainder reappointed.

Scouts (1st and 2nd Class) should generally be used for strategical and tactical reconnaissance, not for protective reconnaissance.

A scout, or despatch rider, should be at least fairly well educated: he must be able to read, and to write an intelligible report; he should be able to read a map, and to work by compass,

sun, or stars; and, in addition to the above qualifications, he should have sufficient general military education to be able to judge what facts to report, and what not; he ought to be able to divine what information is important, and to be able to draw sound conclusions from facts which come to his notice. As some of these latter qualifications are perhaps hardly to be expected from the class of men from which scouts are drawn, it sometimes becomes necessary to use selected officers as scouts, especially in the case of strategical patrols.

It is necessary that scouts should be taught the organisation of all branches of the service; the normal strength of squadrons, companies and batteries, how many vehicles there are with a battery on the line of march, and how many in action, and other similar matters. On proceeding on service all such information regarding the enemy should be communicated to all ranks.

Scouts, if good horsemen, lightly equipped, and well mounted, have little to fear from being pursued by hostile cavalry. When it is considered that the ordinary cavalry man does not ride under about seventeen stone, and often a good deal more, it is easy to imagine that he cannot get near a well-mounted scout, who should be able to ride at least a couple of stone lighter and who is mounted on a picked horse.

If a scout is pursued, he should not as a rule ride straight back to his patrol, as if he does so he will only give its position away, which may result in its being driven back.

A single horseman can escape far easier than a patrol, and a patrol easier than a larger body. A well-mounted scout will usually not find it difficult to disappear from the view of his pursuers, and, having done so, he can then continue his reconnaissance, and rejoin his patrol when he has obtained some information which is of value. It is a maxim in reconnaissance that touch with the enemy having been once gained must be maintained. This is usually done by keeping the enemy under observation by means of scouts.

In the case of protective reconnaissance, contact with the enemy may be obtained but the enemy may retire rapidly; in this case the protective patrols must not move off to follow up the enemy and thus lose touch with their own force, but special patrols should be at once detailed to follow him up: one or more of the protective patrols might of course be detailed for this duty, but they would then cease to be protective patrols, and their

protective duties would be taken over by other patrols. *Reconnoitring* patrols must never lose touch with the enemy once it has been obtained, no matter what hardships they may have to endure, useful reconnaissance cannot be done on the "always come home to tea" principle!

If scouts are frequently practised in carrying out reconnaissance schemes under conditions more or less approximating to those of field service, they will get into the habit of learning to shift for themselves, and will be able to make the best of existing circumstances. Scouts who cannot shift for themselves, and live on the resources of the country for some days at a time, are of little use for practical work, however good they may be in other respects.

The most common of all faults in reconnoitring is that the men will not keep their eyes open. They should one and all be continually sweeping the horizon, as well as the middle distance; with their eyes.

It is continually impressed on scouts and patrols that they must not show themselves on the skyline, as they thereby become visible to the enemy even at long distances; but, on the other hand, it should be equally impressed on them that, in order to get a good view of the country to be reconnoitred, it is absolutely necessary to move from one commanding position to another, to take advantage of every hill or rise from which a good view is obtainable. To do this it is not generally necessary to show one's self on the skyline; one can often take post just below the crest line, and see equally well without showing one's self. When the enemy's positions have been observed from a distance it may then be advisable for scouts or patrols to get closer, by utilising the cover afforded by nullas, and by following valleys, but, except under such circumstances, low ground should be avoided. Of course, if the low ground is of such a nature that a good view of the surrounding country is obtainable as well as cover, such a line of advance is ideal, but it is not usually the case.

Scouts and patrols should work forward by bounds, from one point of vantage to another.

Low and open ground where the patrol is likely to be seen by the enemy should be crossed at the trot; the walk will be the usual pace of advance when a good view over the surrounding country is obtainable, and halts must be frequently made on commanding ground for distant observation with the telescope or binoculars.

Even in a fairly open country the general rate of advance of

an independent reconnoitring patrol will rarely exceed about five miles an hour.

Manceuvres are often made more or less of a farce by the way scouts approach close up to troops in position; utterly ignoring their fire, thus obtaining information which they could not possibly get in war. Scouts should not be allowed to approach nearer than eight hundred yards, unless under cover, and umpires should be on the look-out to put any scouts transgressing this rule out of action for the remainder of the day. Although it is not desirable to check the dash of scouts, it is ridiculous to let them get into the habit of attempting the impossible: observation will have to be carried out from a distance, and it is better that scouts should get into the habit of doing so, otherwise they will be wiped out on service.

The formation in which patrols should move depends on the country and other considerations. In an enclosed country a patrol must either move in a group, with a scout or two on ahead, or in single file. In an open country it may move in extended order, preceded by scouts. Patrols which are in extended order, or in single file, are less liable to be ambushed than if in closed formation, and if ambushed there will be less casualties. This formation has the further advantage that the men are sufficiently far apart to prevent them entering into conversation, and so are more likely to attend to their duties, and to keep their eyes and ears open.

The patrol also covers more ground, and is less likely to pass an enemy by without discovering his presence; but, on the other hand, close formation is often necessary in order to keep under cover. In the case of a strategical patrol going to a distant destination, unless the telegraph or wireless can be used, it will probably be necessary to send back reports through a chain of connecting posts dropped by the patrol *en route*. In a hostile country, however, such posts are very likely to be captured or driven away, and consequently they are not a reliable means of communication. If they *are* used, these posts should be hidden away in places where they are unlikely to be discovered, but their position must be known to all the men of the patrol. When many such posts are necessary the requisite number of men increases so much that a contact troop, or squadron, may be required in place of a patrol.

There is no difference between an unsupported reconnoitring patrol and a contact squadron, except in size: the contact

squadron is an unsupported squadron; it furnishes a rallying-point for its patrols in the same manner that a patrol becomes a rallying point for its own scouts. The actual reconnoitring done by a contact squadron is done by the scouts of its advanced patrols. The information obtained by them is collated, and, if possible, verified by the squadron commander, and is then transmitted to headquarters under arrangements made by the squadron commander, according to circumstances. A contact squadron being an unsupported unit, or supported by other troops only at a considerable distance, will have to escape observation just in the same way as a strategical patrol, if the enemy is in force in the vicinity.

Contact patrols, troops, or squadrons will generally have to march unencumbered by baggage of any sort, or, if they take any transport with them, they must be prepared to risk losing it: their safety depends on mobility and secrecy. They must be more or less constantly on the move, and it follows therefore that the work is very arduous both for men and horses, so that they cannot usually be employed on these duties for more than a few days at a time, especially as all their requirements will usually have to be carried on the horses.

The name Contact Squadron is not a very good one: the objective of the squadron is usually to obtain touch or contact with the enemy, but, on the other hand, a contact squadron may be sent on a mission which may not involve contact with the enemy; it would perhaps be better to call it an independent or reconnoitring squadron.

The system of connecting posts, above referred to, requires consideration: how far should such posts be apart? If they are, say, eight miles apart, the messenger can trot and canter the distance without drawing rein, and can then return at the walk to his own post, thus having done sixteen miles, which is not excessive. If the posts are, say, sixteen miles apart, the messenger will not be able to move so fast throughout the distance, and he will have to remain at the post for the night, if he is not going to overwork his horse.

The further these posts are apart the less men will be required, but in a hostile country probably a section of a N.C.O. and six men would be the smallest detachment possible consistent with safety. If this strength is necessary, it will probably be found impossible to have the posts closer together than fifteen or sixteen miles on

account of the large number of men required. In territory which is not hostile, posts of half the above strength should be sufficient, and, in order to transmit messages quickly, they may be not more than eight miles apart. Considering the above, one must necessarily come to the conclusion that some other means of communication are desirable, such as wireless telegraphy, the ordinary telegraph, telephones, motor-cars, or visual signalling. The latter has, however, much the same disadvantages as connecting posts, *i.e.* it uses up a great number of men, as the signalling stations cannot be far apart owing to the comparatively small range of the instruments employed. For instance, although the range at which the cavalry helio can be read with certainty is about 10-15 miles, the distance at which the Begbie lamp can be read is only 4-8 miles, so that in practice, if continuous day and night communication is to be kept up, the range of the helio is reduced to that at which the lamp can be read. All available means of communication are open to certain drawbacks; the telegraph may be broken or interrupted, or it may be tapped by the enemy, motor-cars may break down or be intercepted, and visual signalling may fail owing to unsuitable conditions of weather. Sending messages in duplicate and cipher may help to ensure safety to a certain extent, but all things considered, except for long distances, a good man on a good horse is probably the safest method of sending despatches, if not the quickest. For communication over long distances wireless telegraphy and motor-cars will in future be largely utilised.

It has been previously mentioned that the regimental scouts and despatch riders should be lightly equipped, and should be mounted on the best horses available. A scout's duty is to see without being seen, he should never fight, except to avoid capture; consequently a lance, sword, rifle, and ammunition are only unnecessary encumbrances, and should be dispensed with. A revolver is the only weapon he requires.

Strategical reconnaissance will generally bring about a collision with the hostile cavalry, as the latter will in all probability be seeking to carry out a similar mission, but, if the objects in view can be attained without bringing about a cavalry combat, so much the better, as the hostile cavalry is not the true objective of strategical reconnaissance. As, however, it will generally happen that the desired results cannot be obtained until the hostile cavalry has been defeated and driven back, it is necessary

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to concentrate as large a mass of cavalry as possible, in order to be in a position to fight under favourable conditions when the enemy is encountered. Strategical reconnaissance requires concentration whereas protective duties require a certain amount of dispersion. Strategical cavalry must not risk defeat in detail, it must take steps to ensure that it is in superior force at the decisive point.

When we consider the masses of cavalry which would be available for strategical reconnaissance in a continental war, it becomes evident that such concentration will cause many serious difficulties, especially in the matter of supply. No country, however fertile, can supply large masses of cavalry if it is concentrated; it therefore will be found necessary to postpone the moment of concentration until the field of battle is reached. In other words, the columns must march on a more or less wide front; but within such a distance of each other that they can mutually support each other. Strategical cavalry must be complete in itself and self-supporting, it must have its own artillery, engineers, telegraphists and ammunition and supply columns, but, as these latter columns are necessarily tied to the roads, and as in civilised countries roads are always numerous, there seems no reason why strategical cavalry should not be materially strengthened by the addition of infantry carried in brakes and motor vehicles.

Two horses in a brake or char-a-banc can convey ten or twelve men with their arms and ammunition; horseflesh is thereby saved, and the difficulty of forage supply lessened. Owing to the extensive use that is now made of motor traction, the supply of horses is diminishing, and it will in future be hard enough to get sufficient for the cavalry and artillery.

The cavalry baggage and trains will have to be adequately protected, as they cannot at all times keep up with the cavalry itself, nor for other reasons would it be desirable that they should; for this purpose, amongst others, the addition of infantry to a cavalry division seems desirable; as it could take over this duty, and set the whole of the cavalry free to go to the front.

In discussing the subject of concentration, it is as well to consider how large a force can march by the same road, and yet be capable of being got up to the front in time to take part in an engagement.

A cavalry brigade, including its first-line transport, takes up

over $1\frac{1}{2}$ miles of road; four such brigades (a cavalry division) will therefore require about seven miles of road space, and its second line transport and trains will require nearly as much again, consequently the head of the column will have almost reached the destination of an average day's march by the time that the rear of the baggage has started. It is evident that if the troops are to have their baggage, the limit has been almost reached. The combatant part of the column could concentrate to the front in about an hour. It appears, therefore, that a division of four brigades is about the largest force that should march by one road, and divisions marching by parallel roads should not be more than three or four miles distant from the central column.

In spite of the fact that a more or less concentrated formation is desirable, it will generally be found necessary to cover a wide area of country with a network of reconnoitring patrols, supported by contact squadrons, or larger units, and, in addition, every formed unit will have to provide for its own protection and to screen itself from observation. Protective duties are therefore required even in strategical reconnaissance, but they must be recognised as being separate and distinct from reconnoitring duties.

The early and general introduction of wireless telegraphy and telephony admits of no delay. A good means of inter-communication is at present the most important and pressing need of modern cavalry. The ordinary telephone, which has recently been used experimentally, is practically of no use to cavalry: it takes too long to lay the line, or to remove it, and it is continually getting broken by men or animals passing over it.

In concluding the subject under discussion, it seems necessary to emphasise the desirability of reorganising our cavalry in such a manner as to make it more independent and powerful. If it is to be used as strategical cavalry, let it be reinforced by mobile infantry, in such a manner that it will be in a position to more than hold its own against an enemy which is composed almost exclusively of cavalry; it will then be independent in the true sense of the word.

CHAPTER III

PROTECTION

As mentioned in the previous chapter, protective duties necessitate a certain amount of dispersion.

Not only have the protective bodies to give warning of any threatened attack, but they have also to delay such attack at all risks, and also to sweep aside all minor obstructions. They must not allow the march of the column to be delayed by small bodies of the enemy, nor should they allow hostile scouts or patrols to see the main body. They must, in fact, screen the force to which they belong both from observation and from hindrance.

Protective duties include those of advanced, rear, and flank guards, outposts, flanking, and combat patrols, and also the more extended duties of protective cavalry and strategic advanced guards.

As far as possible an advanced guard, or in fact any protective detachment, should be in a position to prevent the enemy from bringing artillery fire to bear on the main body, but in practice this is often hardly possible. The distance of the advanced guard in front of the main body depends chiefly on the size of the main column; the larger it is the longer it will take to concentrate in line of battle, and therefore the advanced guard must be both stronger and further out in front; but the question is also affected by the nature of the terrain, and generally speaking, the more hilly the country the less distant the advanced guard may be, and *vice versa*.

In discussing protective duties it is difficult to appreciate to how great an extent these duties will vary in details in different cases. For instance, the arrangements which would be suitable in the case of a small advanced guard composed entirely of cavalry are not necessarily applicable to an advanced guard composed of, say, a brigade of all arms; but we must keep all contingencies

before our eyes, as the combined action of cavalry with the other arms is every bit as important as that of cavalry acting independently.

An advanced guard is roughly subdivided into two main divisions, called vanguard and main guard. The whole vanguard, or at all events the most advanced portion of it, is, except under special conditions, composed of cavalry which does the reconnoitring and furnishes the first line of protective patrols.

When the vanguard consists of all arms, it is common to find that the cavalry is called "independent" cavalry, though in reality it is in no sense independent. This error results from a ill-defined recognition of the difficulty which a vanguard commander will experience in exercising command over two arms which must necessarily be at considerable distances apart, although they are really acting in combination. This difficulty will be better appreciated when we come to consider the actual mode of working an advanced guard in the presence of an enemy.

Although, in the case of a large force, the vanguard may be composed of all arms, it is necessary that the cavalry should have a fairly free hand in the carrying out of its rôle, in any case it must not be tied down to the infantry.

It therefore seems desirable, except in the case of a very strong advanced guard, that the vanguard should be composed exclusively of mounted troops.

Communication between the vanguard and main guard, and between the latter and the main body, must be kept up. In the case of small advanced guards this may be done by means of connecting files, who will pass on all signals from the front. The file in rear should repeat the signal to show it is understood before transmitting it to the rear. It seems desirable that some generally recognised simple signals should be used by all arms of the service for this and similar purposes. Some such signals are included in our regulations, but they are hardly sufficient for the purpose. The signals usually required will be as follows:—

- (a) The "all clear" signal; the sword, lance, or rifle waved in the air, or a semaphore flag may be used in a similar manner.
- (b) The "halt" signal; the weapon (or semaphore flag) held up perpendicularly above the head.

N.B.—This signal when used by advanced guards will only indicate that the vanguard has halted, and will not be

taken as an order to the main guard, or other detachments in rear, to halt. The vanguard may have halted to reconnoitre, or it may be checked by the enemy. The commanders of the main guard, or main body, will then use their discretion as to whether they too will halt, or close up on the more advanced detachment. If the body in front is in a good defensive position, it will, as a general rule, be better to close up than to halt, otherwise, should the advanced troops be driven out of their position, the main body may find itself exposed to fire from that position. In the case of weak advanced guards, the connecting files may be single in order to save men.

- (c) The "advance" signal; the weapon, or arm, waved from rear to front, finishing pointing to the front, to indicate that the vanguard is again advancing.
- (e) and (d). The "enemy in front," in large or small numbers (*vide* regulations), is a signal which is also useful, but it can be better seen if made with two semaphore flags, held horizontally with the butts together, than with the weapon.

Such signals are very useful and simple, but unless the same signals are used and understood by all arms, as is only partially the case at present, they cannot be used except for purely regimental purposes. In practice signals can only be used from front to rear; flanking patrols cannot depend on their signals being seen, and so should not rely on them, but send in messengers.

In the case of large forces where the distances between the different parts of an advanced guard, and between the advanced guard and the main body, are considerable, the above system of signals will only be applicable to the vanguard itself, and other means of inter-communication will be necessary between the larger units, such as visual signalling, or a service of motor-cars.

As it is very much easier to see signals, or to observe what is going on, in front than in rear, the commanders of the main body, or main guard, should always send special information to bodies in front of their intention to halt; or of any change of direction, or other important news.

The advanced guard must not run away from the main body. Under ordinary circumstances the advanced guard will keep its distance from the main body which it is protecting, but in the

presence of the enemy the movements of the main body must necessarily be regulated to a considerable extent by those of the advanced guard.

In the presence of the enemy both the advanced guard and the main body should advance by "bounds" from position to position. This necessitates a good eye for a country, but every tactical operation depends on the proper utilisation of ground for the purpose in hand. Should the advanced guard be in touch with an enemy who is retiring, it is not necessary, in order to maintain touch, that the whole advanced guard should push on at a rapid rate, but touch can be kept by detailing patrols, or contact troops; or squadrons, from the advanced guard for this special duty. If the advanced guard itself pushed on in pursuit, it might be drawn away from its line of advance, and uncover the body it is protecting.

An inferior force of the enemy must be brushed aside *quickly*, and this can generally only be done by turning his flanks. A superior force should be thoroughly reconnoitred by the vanguard while the main guard takes up the strongest defensive position available.

Rash advances of the advanced guard against superior forces are apt to bring about grave results, as the main body may be involved in a fight in support of the advanced guard against the wishes or intentions of the commander.

The advanced guard commander should generally consult the commander of the main body before attacking an equal or superior force of the enemy. The advanced guard cannot possibly protect the flanks of the main body, unless the former is abnormally strong, and then only by the method used in savage warfare, of picquetting the heights; or important tactical points on the flanks, and the picquets joining the rear guard after the column has passed.

Under ordinary circumstances the main body must arrange for the protection of its own flanks, and not expect the advanced guard to do it.

It will be noted from what has been previously said about the desirability of the advanced guard advancing by bounds from position to position, that it will be impossible to preserve any fixed distance between the main body and the main guard, or between the latter and the vanguard. The distance will vary from time to time according to the nature of the terrain. As

far as circumstances permit, no detachment in rear should advance from its position until it sees that the detachment in front has seized the next position.

The protective patrols of the vanguard should at once drive back any hostile patrols they may encounter.

The general tendency in all protective duties is to keep the protective detachments too close to the column they are protecting. A good general rule to remember is that the head of the main guard should be about the same distance in front of the head of the main body as the head of the main body is from its tail, *i.e.* the same length of road space when in column of route, but the minimum distance, in the case of small advanced guards, should not be less than about 1000 yards. This arrangement will be found to render the main body fairly secure from being surprised by artillery fire.

Observant officers will have noticed at manoeuvres how common it is to see hostile patrols standing facing each other, at only three or four hundred yards apart, and remaining in passive observation of each other. Nothing can be more ridiculous or unlike war. The patrol which is first to dismount and pour a volley into the opposing patrol would be master of the situation. A volley at close range can hardly fail to cause loss to the opposing patrol, and the patrol which gets in the first volley will have gained the initiative, and should cause the other to retire with loss. If the country is open it would be preferable to gallop to the nearest cover before opening fire; a hillock, a few rocks, a nulla, or any slight obstacle will suffice to make it difficult for the hostile patrol to charge with effect, and will also give some cover should the enemy reply with rifle fire. When dismounting for fire action, the horses should be "coupled," so that every man is free to use his rifle. If patrols attack mounted, they should remember to keep their ranks closed, and to act as a formed body, instead of charging in loose order, which will only bring about a series of individual combats the outcome of which may be doubtful.

As a general rule, if the hostile patrol is in closed formation, it will be best to use rifle fire against it, but if it is scattered, a mounted attack may be the most effective. The great point is to be the first to do *something*; either to charge, or to fire before the enemy moves.

Flanking detachments will act in almost precisely the same manner as advanced guards, holding each tactical position as

long as it is of use, or until relieved by another flanking detachment, and then moving on rapidly to seize the next position on its line of advance. Flanking detachments detailed by the advanced guard commander will usually be for the protection of the flanks of the main guard, as the officer commanding the column must make his own arrangements for protecting the flanks of the main body.

Rear guards, like advanced guards, are usually subdivided into two portions, the rear party and main guard. The general dispositions and arrangements are similar to those of advanced guards, but the scouts and protective patrols of the rear party must halt and face to the rear every few minutes, utilising all commanding ground as points for observation.

The retirement of a large force in the presence of an enemy may take one of two forms; it may retire as a column covered by a rear guard, or the whole force may fall back acting as a rear guard. In the former case the rear guard has generally to shift for itself and to expect no support, but in the latter case, alternate portions of the force act as rear guard, and its retreat is supported by the echelons in rear.

The commander's operation orders should clearly indicate which of these two operations is contemplated. In an enclosed country there is not, as a rule, space for the deployment of large forces, and consequently a rear guard of suitable strength will generally be able to cover the retreat of the main body. In an open country, on the other hand, as the enemy can usually easily turn the flanks, it is often necessary to employ a considerable portion of the force to hold off the enemy.

In savage warfare, where the rear guard is apt to be cut off, or to get into difficulties owing to having to carry its own wounded, the rear guard should generally be supported by the main body, or, in other words, the main body must keep touch with the rear guard instead of the rear guard keeping touch with the main body, as is the rule under normal circumstances.

Like all other military operations, a successful retirement depends to a great extent on the arrangements made for command. In the case of a single regiment on rear guard, the squadrons, under the direction of the regimental commander, fall back alternately from position to position, and the positions in this case should not generally be very far apart, otherwise it would be impossible to keep the regiment in hand.

Although the regimental commander should, as far as possible, direct the operations, it is nevertheless incumbent on squadron commanders to use their discretion so as to retire in time, and avoid being cut off; to do this they must watch the movements of the other squadrons, and conform to their movements. Squadron commanders must decide *how* they will retire, whether by alternate sections, troops, or the entire squadron. If they retire by small portions at a time, an officer should be sent back to the position in rear to get the men together, and to see that they retire to the place selected. Although retirements by smaller units may be sometimes necessary, it will generally be advisable not to send back a smaller unit than a troop, in order to ensure that the squadron does not get out of hand. Such retirements should generally be made at open files at the trot. In the case of a cavalry brigade acting as rear guard, the *unit* should be the *regiment*. Regiments should fall back in succession from position to position; under the direction of the brigadier. It is not meant that a regiment should necessarily be concentrated on any one position—on the contrary, its squadrons may be holding separate positions; but when it retires supported by another regiment, or battery, echeloned in rear, it should be got together again, and kept in hand by its commander.

Likewise in the case of a division, the unit should be the brigade. If one brigade is not enough to cover the retreat, and it is found desirable to use two or more brigades, the divisional commander should order one brigade to cover the retirement and should support its retirement by another brigade in rear. Each brigade thus acting as rear guard in turn.

In the case of regiments retiring alternately; the retirements should be considerably longer than in the case of squadrons, and, in the case of the alternate retirement of brigades, the distance between positions should be still further increased.

Except when only small forces are engaged, it is a mistake to occupy positions which are too close to each other; this is especially the case in an enclosed country where columns have to move on a narrow front. After making the pursuer deploy, the rear guard should, if possible, slip away, so that the enemy falls again into column of route, but in an open country the pursuer will very probably not resume column of route, and, consequently, in order to delay him, he will have to be opposed more frequently than in an enclosed country.

As has been previously pointed out, the method of retirement of any unit must be left entirely to its commander, but the superior commander should, whenever possible, indicate the positions to which units are to retire, and he should also, as far as circumstances permit, indicate the order in which units should fall back, *i.e.* which unit should retire first and which last.

From the above it will be noted that in all cases, whatever the strength of the force employed on rear guard duty, the same principles of conduct apply.

A correct grasp of the above principles will ensure cohesion and facilitate the successful accomplishment of what is rightly considered to be one of the most difficult operations in war.

Special attention has been drawn to the subject of retirements of large bodies of cavalry, because mounted troops are more suitable for rear guard operations than infantry. The latter can indeed take up positions with the object of forcing the pursuer to deploy, but it cannot afford to allow itself to become engaged with the enemy in a fire fight without the risk of finding itself unable to retire. It is much more difficult for infantry to break off a fire fight than for cavalry, as the latter can, when it once begins to retire, fall back much more rapidly, and so get out of range. The long range rifle is quite as necessary for cavalry as it is for infantry, as the cavalry, especially in retirements, will have to do most of its shooting at long ranges, as it should retire when the enemy arrives within decisive ranges. A carbine is therefore not a suitable weapon.

As a general rule, shock tactics are unsuitable in retirements; but, if the enemy's mounted troops are pressing forward recklessly and unsupported, a sudden charge, especially if it be made from a flank, is likely to be most effective, and to check the pace of the pursuit. Successful charges must not, however, be followed up; the unit should rally, and regain cover as quickly as possible.

When contact with the enemy has been established an advanced guard will, in many cases, be unable to continue its *rôle* of protecting the main body. It may itself be engaged with the enemy and be tied to its position, or it may, in accordance with the intentions of the superior commander, have commenced to manœuvre with the object of deceiving the enemy and leading him on to expose himself to the attack of the main body. In such a case the main body must screen its movements by other protective bodies, such as combat patrols. These patrols may

be of any strength, or they may even be complete troops or squadrons.

When cavalry is manœuvring in the presence of an enemy it will probably be necessary for the main body to frequently change its direction, and to such changes of direction the combat patrols must conform. For example, the patrols which were originally in front of the main body will, when the latter changes direction to the right, be on the left of the main body, and the patrols which were originally on the right will now be in front. Combat patrols will continue their protective duties even during the course of an engagement. They should be particularly on the alert to notice the approach of any reinforcements to the enemy, and should give immediate information to the *superior commander*, in order that he may be able to employ his reserves against them. Commanding officers of regiments which are on the flanks will do well to have small combat patrols of their own, in addition to those detailed by the superior commander, as the sound of the guns will draw any hostile cavalry which may be within reach to the battlefield.

Operation orders should always clearly indicate what duties the cavalry is to perform ; whether reconnoitring, or screening, or both.

Officers of the other branches of the service will do well to remember that the *superior commander* is responsible for reconnaissance, and, if the latter wishes to delegate this duty to his cavalry commander, he should clearly state this in his orders. The superior commander has presumably the fullest information available about the enemy, and he is in a better position to decide what measures are desirable than an inferior commander is. The limited reconnoitring required for protective duties must be clearly distinguished from true reconnaissance.

Independent cavalry will have to take very special precautions when in bivouac within striking distance of an enemy. An enterprising enemy is certain to be on the look-out to seize an opportunity of taking the hostile cavalry at a disadvantage by attacking him when in camp, especially at night. Extreme vigilance and care in the selection of a suitable camp will be necessary to ensure safety.

Outposts, for the protection of troops which are at rest, differ very considerably in nature according to the theatre of war and

peculiarities of the enemy. In civilised and thickly populated districts, especially in Europe, outposts generally consist of advanced detachments holding villages, buildings, or bridges on the roads by which an enemy might advance to attack. In such circumstances the main body is usually billeted in towns and villages in the vicinity of their line of march. So long as the enemy cannot bring artillery fire to bear on such positions they are safe. The outposts must therefore be sufficiently far to the front to prevent hostile artillery being brought into action against them. In an open country, where the enemy can move freely across country, more elaborate arrangements will generally be necessary, and in sparsely populated countries, where the main body has to camp or bivouac, a regular system of cossack posts, picquets, and supports will usually be necessary. In all cases, however, the same general principles will apply.

Outpost duty, especially at night, is very hard on the horses. Horses knock up from want of regular feeding and from want of rest more quickly than the men do, and consequently, when working in combination with the other arms, cavalry should not be employed on outpost duty at night, except such small detachments as may be required for reconnaissance and for carrying messages. It should generally be quartered in rear of the infantry.

When, however, cavalry is working independently, or in isolated positions, it must make its own arrangements for protection, and it can often save its horses by furnishing dismounted outposts. If alarmed at night, cavalry should usually not saddle up, but should defend itself by rifle fire; there is therefore no necessity for the outpost squadrons to always have their horses with them, except such as are required for reconnoitring, etc.

The selection of camp is an important matter, but in choosing a camp it is most necessary that the disposition of the outposts should be made to suit the camp, or *vice versa*.

The two things must, in fact, be taken together, for the position of the one depends to a great extent on the position of the other. The first and most important matter for consideration is, which is to be the line of resistance in case of attack? Is the main body to support the outposts, or are the outposts to fall back on to the main body? If outposts are far away from camp they may be rushed before help arrives, but, on the other hand, outposts which are at a distance from the camp should give earlier information of an attack than if they were closer in. Perhaps the best

plan is to try and combine the advantages of both, by having outer and inner lines of outposts; the former the line of observation, and the latter the line of resistance, but the line of observation should be *far* out to the front, whilst the line of resistance cannot be too close to the main body, and may even, in some cases, be the perimeter of the camp itself. The line of observation should consist of standing patrols, or even of contact squadrons; the line of resistance of the picquets, supports, and reserves, or of the inlying picquets, as the case may be. Cossack posts and vedettes may be considered as an *inner* line of observation, not as the real line of observation.

The arrangements for night outposts require very careful consideration. Outposts close round a camp are liable to be fired at from the camp, but, if they are far away, they may be attacked and driven in without the noise of the firing being heard, and the enemy may rush in on the heels of the outposts. If outposts are placed within effective range of the camp, they should be so placed that they are protected from the fire of their own camp as well as from the fire of the enemy. Night outposts, except patrols, should hold their posts at all costs, and should not retire on to the camp, as it is impossible for those in camp to know whether they are friends or foes. The difficulties above referred to are more apparent in savage warfare, or in open country when the troops are in bivouac, or camp, than in cases where they are in billets, or holding naturally strong positions.

Generally speaking, it is better to have a camp on commanding ground than on ground which is commanded, but cover from view is necessary in the daytime: the enemy will usually not fire at a target which he cannot see. Camps in hollows are dangerous unless the force is large enough to occupy the whole area, in which case the perimeter, or line of resistance, would probably be close to the high ground surrounding the area, which could consequently be quickly occupied in case of attack.

It should be noted that perimeter camps are generally dangerous in the presence of an enemy provided with artillery, or even with good rifles, because they offer too good a target; but this drawback does not apply at night, or when there is cover from view and the enemy is unaware of the locality occupied.

Picquets should be as near as possible to cossack posts, and supports as close as possible to picquets. The only object in posting picquets some distance in rear of cossack posts, and supports far

behind picquets, is to obtain cover for them, and to place them in central positions where they can quickly move to support the threatened point. Provided these conditions can be fulfilled, they cannot be too close; in fact, the picquets may often with advantage join the supports.

Hostile scouts approaching an outpost line should not be fired at until they are so close that it is almost impossible to miss them. If fire is opened at them at long distances it only gives away the position of the outposts, and at night such firing will enable hostile scouts to avoid the picquets, and possibly penetrate within the outpost line.

In case of any portion of the outpost line being required to fire on the enemy, every available rifle should be used. Horses should be coupled, and men should not be wasted in holding horses, as outposts are not usually any too strong. Any party sent out from the outpost line to meet the bearer of a flag of truce, or any armed persons, should be in superior force, and flags of truce should be met by an *officer's* party.

Larger parties of the enemy approaching the outposts should be treated according to their strength compared with that of the outposts opposing them; for instance, a patrol of eight men might be allowed to approach a picquet so close that they would probably nearly all be killed or wounded by fire at close range, but a force of, say, two hostile troops approaching a picquet should be fired at at 800 yards or so, and a strong force of the enemy at 1200 yards, or even further, in order to delay their advance until reinforcements come up.

Reconnoitring patrols give away the position of outposts: a few small standing patrols well out in front will generally be found the best arrangement for getting early information of attack. Horseflesh is saved, and standing patrols will, if well placed, be able to see more than patrols which are on the move.

It must always be borne in mind that any ordinary outpost line can be rushed if the enemy comes on boldly and quickly in sufficient force, hence the necessity of having standing patrols well out to the front: the main body, unless it is very close to its outposts, should therefore be in possession of a good position for defence, as it may not be able to reinforce the position held by the outposts in time to meet the attack. The line of resistance of the outposts is not necessarily the position that will be occupied by the main body. If the outposts are to fall back on to the

position held by the main body, special arrangements must be made for their lines of retreat, so as not to mask the fire of the main position.

If the enemy is in force within striking distance, the only safe plan is to watch his camps, by means of patrols, so that he cannot leave them without information of his movements being forthcoming. Touch with the enemy must be established and maintained. To do this, it may be necessary to send forward contact squadrons, or even larger units, according to circumstances.

The duties of protective cavalry covering the front of an army are similar to those of the vanguard cavalry of an advanced guard, except that they are on a larger scale, and, if such cavalry is closely supported by troops of the other arms, with the object of screening the front of the several marching columns of an army, this force is called a strategic advanced guard.

Should it be found feasible in the future, as seems highly probable, to obtain the required information regarding the dispositions of the enemy by means of airships or flying machines, the strategic advanced guard will be the duty on which the bulk of the cavalry will be employed at the commencement of a war.

As the front to be covered will be extensive, a considerable amount of dispersion will be necessary, but, as the cavalry in this case will not be acting independently, but will be closely supported by detachments of the other arms, there will be less danger of defeat in detail.

CHAPTER IV

SHOCK ACTION

THE individual training of man and horse is the basis of all shock action. The man must be a good horseman and skilled in the use of his weapon, and the horse must be thoroughly under the command of its rider.

Especially in the attack of cavalry *v.* cavalry, cohesion, smooth riding in the ranks, knee to knee, and power of manœuvring at the rapid paces are essential. This is impossible unless both horses and men are well trained.

Short service cavalry are necessarily at a disadvantage, in that the recruit has to learn to ride as well as to learn all the other requirements of a cavalry soldier in a limited period of time, and in this respect the British and Indian armies have a considerable advantage over the cavalries of the Continental Powers, which should, to a certain extent, make up for the deficiency in numbers.

The difference between a really efficient cavalryman and a moderately efficient horse soldier is far greater than is generally recognised. In mounted combat an exceptionally well mounted man, who is a first-class rider and skilled in the use of his weapon, can easily take on three or four ordinary horsemen. It is therefore evident that individual efficiency will count for much, and compensate for considerable inferiority of numbers.

Generally speaking, the riding of our British and Indian cavalry is undoubtedly above the average, but skill-at-arms leaves much to be desired. The absurd lines on which assaults-at-arms have been carried on for many years past is partly answerable for this deficiency, but there is lately a tendency in some quarters to improve them. What can be more ridiculous than the mounted combats, such as sword *v.* bayonet, and sword *v.* sword, where the combatants are confined in a marked-out enclosure, and forced to fight in a manner quite unlike what they would be required to

do in war ! The horseman may be seen sheltering himself behind his horse's head and neck, whereas in actual fighting his opponent has merely to prick the horse with his weapon to make it unruly and out of hand ; and, again, why teach men to circle round each other, waiting for an opening for attack, instead of teaching them to ride down their opponent ? The sword, or lance, is essentially an offensive weapon. The cavalry soldier should attack, *always* attack, making use of the weight and impetus of his horse, and using the point in preference to the cut.

Let us banish all spectacular displays from assaults-at-arms, and only encourage such practices as will be of value from a purely military point of view. The popular amusement of tent-pegging, although a fine display, is not of much military value, and it spoils the horses, which get wild and excitable, and often learn to pull. If it is to be retained as a test of skill-at-arms, it might be much improved, from a military point of view, by making the "run" shorter, and by making the man quickly turn about at a given point and come back at another peg ; anything, in fact, to keep the horses handy, and to prevent them from wanting to race.

As has been previously said, the men should be encouraged to use the point instead of the cut. The former is far more deadly, and it is not so difficult to teach the men to point well as to cut well. It is often said that a man's natural inclination is to cut, not to point, but, granted that it is so, what is he going to cut ? The opponent's head is covered by a helmet, and his body by clothing, shoulder straps, bandolier, and other marching order equipment ; what spot except his face, neck, or perhaps his arms below the elbow are vulnerable ?

To cut well may be said to be a lost art : unless a man has a sword in his hand almost daily, and is in constant practice, he will not do much damage by cutting, and unless a man has a curved tulwar he cannot give a really effective cut. Nevertheless it seems rather doubtful policy to adopt a straight thrusting sword, which is absolutely useless as a cutting weapon. Although the man should be taught to rely chiefly on the thrust, it seems to be advantageous to have the option of cutting, as it may at times come in useful, especially in a *mêlée*, where a man may be surrounded by several assailants. The author has designed a sword which has been manufactured for him by the Wilkinson Sword Company, which is suited for both purposes.

It has a slightly curved blade, with a handle something similar to that of the new-pattern British cavalry straight sword. The handle is set on at such an angle that, although the blade is curved, the point can be delivered with accuracy. It is lighter than the British cavalry straight sword, weighing only 2 lbs. 4½ ozs. The blade is 34½ inches long, but, owing to the nature of the grip, it has a reach from the hand of 36 inches.

It is a bad practice to let men thrust at balls, or other objects which offer no resistance to the point, as the men will not learn to realise the amount of resistance to be expected, and will probably let the sword fall from the hand.

Dummies on springs, or on a pivot, should be provided. They should be stuffed in such a way that force will be required to make the sword penetrate, but they should swing round when the sword has penetrated so that it can be withdrawn without breaking it. A square, thin iron frame may be covered with sacking, and tightly stuffed with wood shavings. The frame revolves on a pivot let into a wooden stand. For practising cuts, head and post practice is useful, but the necks should be at least an inch in diameter, and made of some soft wood which will not snap off when struck with the sword. All cuts should be directed at the neck. In head and post practice, there should be no regulation course: the posts should be placed alternately on either side of a narrow track marked out with stable litter, and the trooper told to keep to the track, and take the cut or point on either side as they happen to come. Posts should be of various heights above the ground, and there should be some objects to point at *on* the ground. The position of posts should be changed daily.

The cavalry soldier should be taught two methods of attacking with the point: the "sword in line" position, and the attack from



the "engage" position. When the horse is at speed, as in charging, the impetus of the horse is quite sufficient to make the point take effect, and, consequently, all the man has to do is to hold his arm and sword straight out, so that the point will strike the object aimed at.

In tent-pegging, or pig-sticking with the long spear, this is always done; if the rider lunges when moving at speed he is almost certain to miss his mark. When attacking from the "engage" position, which should only be done when the horse is moving at a slow pace, the thrust should be made without drawing back the arm, accompanied by a lunge of the body from the waist, and the legs should be applied to the horse at the same moment to make him spring forward. This will add force to the thrust, and such a point might often be useful in a *mêlée*.

Mounted combat should not be too freely indulged in, as it is apt to frighten the horses, and make them unwilling to go up to an opposing horseman. Even from the point of view of teaching the man, mounted combat is not altogether satisfactory, as it is dangerous to let the combatants ride at each other at high speed, as would be desirable in war. If mounted combat is to be practised at all, the men should be placed some fifteen yards apart, and then told to ride at each other, and get in a cut or point in a given time, say, fifteen seconds. The man who has the best of the bout before time is called should be adjudged the winner. No fencing should be allowed; they should *gallop* at each other, and try to get in a point, or cut, and then turn quickly about, and attack again in a similar manner.

In the case of a "counter," when one man cuts and the other points, the point should win.

If the men are placed at only fifteen yards apart they have not space to get up sufficient speed to hurt each other. It is a good plan to blindfold the horses when first teaching men to fight on horseback.

It is doubtful, however, whether it might not be better to discontinue mounted combat altogether. It will generally be found that a well-trained horse which has not been used for mounted combat will face an opponent's weapon better than a horse that has been at the game before, and that knows what is coming.

It is a good practice to scatter some twenty or thirty dummies about over an area of, say, 100 yards side, and to let squads

of men attack, and knock them down with the point. The dummies may be made of sacking stuffed with straw, attached to a wooden frame like a cross, and sustained by tripod legs, or on wooden stands.

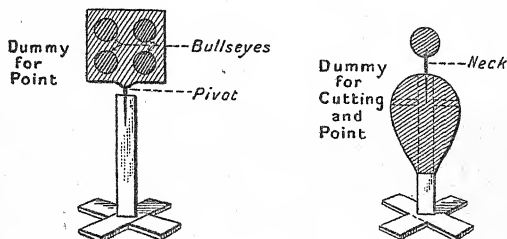
The men should be taught to lose no time; but to at once attack another dummy when they have knocked down the first one.

All attacks should be made at speed.

Some dummies may have a head and neck, for practising cuts.

This practice requires quickness in selecting the object of attack, and is a good test of the skill of the rider and the handiness of the horse.

The preliminary instruction of the recruits on foot should



be carried out from the *mounted* position, lunges being made from the waist only (without advancing the foot), and, as soon as the recruit has learnt the engage, parries, and thrusts, the sooner he is put to mounted exercises the better. Teaching fencing on foot is of little use to a cavalry soldier, but it is not a bad practice to put recruits on dummy horses, placed within reach of each other, and let them fight, and practice parries and returns, under the directions of the instructor. It is well to note that the first step towards getting increased efficiency at skill-at-arms is to insist that every officer should be himself efficient in the use of his weapon, otherwise it is impossible to expect much from the rank and file.

At assaults-at-arms it is desirable to encourage team events instead of individual events, in order to endeavour to get a high average of skill-at-arms instead of the proficiency of a few

individuals. For example, in a competition between squadron teams at head and post practice, the teams should be drawn by lot on the day previous to the competition, or selected by an uninterested party. In this way it is possible to ascertain the comparative state of efficiency of the different squadrons at skill-at-arms. Separate events can be arranged for different classes of men : events for men under three years' service, and for men over three years' service ; events for recruits, and events for non-commissioned officers, and separate events for officers.

A lot of time is wasted in some regiments in riding-school work of a stereotyped nature. The right turn, left turn, circle right, and similar exercises are of little use except for the preliminary training of recruits and remounts.

Frequent repetition of such exercises only bore the men, and make the horses get into the habit of going in a slovenly manner ; except in the case of wild and excitable horses, on which it certainly has a soothing and steadying effect.

A good troop horse should be as handy as a well-trained polo pony, though such a high standard of excellence is rarely attained. The generality of troop horses are by no means as handy as they might be made if more attention were paid to the manner of breaking them. The difference between an ordinary polo pony and a really first-class pony is that the latter, even when galloping fast, will always turn about on the haunches, instead of on the centre, or, as is often the case, on the forehand. Even in the latest edition of "*Cavalry Training*," in describing the "*aids*," there is no description of the correct mode of turning a horse about on his haunches when moving at speed. Neither the correct aids, nor the necessity of turning a horse on the haunches, are sufficiently impressed on the men ; the matter is consequently much neglected, though it makes all the difference whether a horse is really handy or whether he is not. In turning on the haunches at a gallop, the rider should lean back, and, by a strong pressure of both reins, check the pace and collect the horse ; this should be done without a jerk or roughness, so that the horse will not throw up his head ; as the horse shortens his stride in obedience to the pressure of the reins the rider should, if he desires to turn to the right, press the reins against the left side of his horse's neck by carrying his hand slightly to the right, and at the same instant he should apply his left leg *strongly*, to hold the horse's quarters, and prevent them flying out. The pressure of leg must be maintained until the

horse has come about, and then the rider should apply both legs, so that the horse leads off in the new direction with the correct leg leading.

When turning about to the right, the horse should be leading with the off fore, both before and after the turn, and *vice versa*. It may be noticed that as the majority of horses naturally turn to the left much easier than to the right, it is advisable to make a horse turn to the right much more frequently than to the left, so as to counteract this natural tendency.

Before a horse can be considered properly broken he should be thoroughly accustomed to obey the pressure of the reins on his neck. With a well broken animal it should not be necessary to feel the horse's mouth with the rein on the side towards which the rider wishes to turn him.

Horses when once passed into the ranks should be almost always ridden with the reins in one hand. On drill parades it is as well to drill frequently with drawn swords, so that the men should thoroughly get into the habit of using only one hand to control the horse.

As a general rule, horses should on parade, or manoeuvres, be ridden on all four reins, with a light and equal bearing on both the bridoon and the bit.

It is very important that horses should be thoroughly trained not to funk meeting other horses. Attack and defence practice with drawn swords, or with lances or single sticks, is a most useful exercise for this purpose. In the training of remounts it is very desirable that the horses should be taken out of the ranks for a few minutes every day for individual work. Nothing shows a bad system of horse breaking more than to see horses refusing to leave the ranks.

It is, perhaps, unnecessary to refer to the absolute necessity of steadiness, and smooth riding in the ranks, as the first requirement for manoeuvring. In spite of all that can be done, it is most difficult to get the men to keep knee to knee when moving fast, and particularly when about to attack. This is, however, not entirely the fault of the men, but is due to faulty leading. Commanders must realise the fact that no troops, however well drilled, can keep their formation for long when moving at the *extended* gallop, and the pace of the *regulation* gallop is frequently exceeded. There is, in fact, usually a great deal too much galloping, especially in operating against hostile cavalry. Against infantry, or guns,

it is a different thing, as it will matter little if the attacking cavalry gets into loose order ; in fact, it will generally have to attack in extended order, and it is necessary to cross the fire swept zone as quickly as possible.

In attacking hostile cavalry, however, a lot of galloping is unnecessary, except perhaps in the preliminary manœuvring, *before* forming line to attack. A squadron cannot cover more than 60 to 70 yards at charging pace without opening out, nor can the *extended* gallop be kept up for any distance without the same result. It therefore appears desirable, in attacking hostile cavalry, to defer galloping as long as possible, in fact until the enemy is within 300 yards or so, and not to actually charge until within 50 or 60 yards. The actual charge should be at *top speed*. As a rule the charges one sees executed at drill are far too slow and half-hearted, it is a bad practice to let the men get into the habit of charging in this manner. At drill, charges should not be practised frequently, as they tend to make the horses wild, but, when they are executed, they should be carried out with dash. In such a short space as 50 yards or so, a fast horse will hardly have time to get out of the ranks, and it does not much matter if he does. Any specially slow horses should be put in the rear rank. It should be borne in mind that, in a cavalry combat, if the superior commander sounds the "charge" only those troops which are within charging distance will actually charge at that moment, the remainder will charge when they come within reach of the enemy opposed to them, or may even not charge at all should there be no enemy in front of them, and should there be no necessity for them to join in the fight in support of their comrades already engaged.

It is open to doubt whether the intervals between squadrons in line, as prescribed in our regulations, are not excessive ; especially as these intervals are in practice often considerably increased, owing to the fact that movements in column at a rapid pace, previous to wheeling into line for an attack, generally result in the column opening out to a certain extent. When the squadrons have wheeled into line, or in the act of doing so, the troops close in towards the directing troops, thus leaving too much interval between squadrons. It would seem, therefore, that the squadron intervals might with advantage be reduced by half ; *i.e.* to 4 instead of 8 yards.

This reduction of interval would also mechanically tend to

prevent the ranks from opening out during the attack ; it would be better, even if a few men were crowded out of the line, than having gaps in it.

Although it has been recommended that the gallop should not be commenced too soon before the collision of the opposing cavalries, the preliminary manœuvring, with the object of gaining the enemy's flank, will generally have to be executed at the gallop, in order to out-manceuvre the enemy by moving faster than he does, but the pace may afterwards be slackened, especially just before wheeling or forming into line to a flank for the attack. This will steady the men and horses, and will give leaders the opportunity to correct intervals and distances.

Formations of line on the head of a column take longer than forming line to a flank, and it also consumes more ground, and will bring the combatants into collision much sooner, but for this very reason it may sometimes be desirable, in order to strike the enemy before he can deploy.

To enable line to be formed on the head of a column the leading unit will have to hold back until the others come up, but by so doing it may lose its opportunity of taking the enemy at a disadvantage. It therefore seems desirable, as a general rule, when line is to be formed to the front, that the attack should be made in an echelon formation, such as double echelon, so that the leading body will not have to check its pace or hold back.

Forming line to a flank has the advantage that line can be formed simultaneously, without any unit having to wait for others to come up, and it does not bring about a collision so soon, and therefore keeps the enemy longer under the fire of the horse artillery. Movements in column to a flank, with the object of wheeling, or forming into line to a flank, should be frequently practised at the gallop, with changes of direction of the head of the column. The open column of squadrons is usually a more suitable formation than column of troops, as it is less vulnerable to artillery fire, and distances are not so easily lost. From column of squadrons, line to a flank should be formed by the wheel of troops, followed by the formation of squadrons.

If bad ground has to be traversed in the movement to a flank, instead of continuing to move in column of squadrons, each squadron can "advance by sections from the right of troops," from which formation line to a flank can be formed even quicker than from column of squadrons.

The quickest way of forming line to a flank from column of sections, or half sections, is to give the command, "sections (or half sections) right (or left) wheel"; after the wheel the sections will close on the directing section.

Attacks to a flank from mass have the disadvantage that if deployment is delayed too long, there is a danger that the enemy may strike the mass before deployment is completed, and for this reason movements in open column seem preferable, as line to flank can be formed much quicker. On the other hand, movements in open column should not be attempted until the position of the hostile cavalry has been ascertained for a certainty, otherwise he may strike the head of your column, or strike it at a disadvantageous angle.

If when moving in open column the enemy threatens the head of the column, the commander of the leading unit should at once change direction to the flank *away from the line of fire of his guns*. This should be made a convention, and should be carried out without hesitation, and without waiting for orders, by the commander of the leading unit.

As a preliminary movement prior to taking open column, mass, column of masses, or quarter column is desirable, as the troops are then under better control and more under the hand of the leader. If in view of the enemy, a movement to a flank in mass has the advantage that the enemy will find it almost impossible to estimate your strength, as the regiment nearest the enemy hides the remainder from view.

The employment of "succour" squadrons, to follow each attacking line at a distance of, say, 250 yards, is worthy of consideration. They should be the local reserves, which should fall upon any formed body of the enemy who may break through the line, or through any gaps that may have been left open.

In the cavalry attack against either infantry or guns, success can only be attained by a thorough recognition of the occasions which make attack possible. As Von Bernhardt says, "attempts to ride through the zone controlled and swept by effective infantry fire may be looked on as synonymous with self-destruction."* These occasions are, either complete surprise, which is difficult when handling large masses of cavalry, or when the troops to be attacked are heavily engaged with other troops. The ordinary fighting formation of infantry is a succession of long lines, one

* "Cavalry in Future Wars."

behind the other, and generally more or less extended, especially in front. These lines are peculiarly susceptible to flank attack, as they can only bring a very small volume of fire to bear to a flank, and troops which are engaged in a fire fight in front cannot change front to meet a flank attack. It is therefore from the lines in rear of the firing line that a cavalry attack is likely to suffer most. It follows, therefore, that in making such an attack, the cavalry must make each and every line of infantry the objective of its attacks, and such attacks should be made in successive lines. It may be taken as a general rule that cavalry attacking infantry should envelope the flanks of the infantry, so that the infantry fire must necessarily be dispersed instead of concentrated, but this rule requires some modifications in the case of an attack against the flanks of an infantry line.

Although small bodies of cavalry have occasionally in the past routed immensely superior numbers of infantry, it cannot be expected that this will often happen, unless the infantry is in a very demoralised state. The numbers of cavalry employed should be in some measure proportionate to the numbers of the infantry to be attacked, otherwise decisive results cannot be expected. Cavalry once launched to the attack of infantry, or guns, must continue on its course at all costs, as to retire again will be certain annihilation. When once the cavalry has reached its objective, neither the following lines of infantry nor hostile artillery can bring fire to bear on it without firing equally on their own troops. As the chief danger to cavalry, in attacking a line of infantry from a flank, is from the second and third lines, it may be advisable to defer the attack until the greater part of the rear lines have merged into the firing line, but the selection of the moment for attack must be left to the cavalry leader. The responsibility which he bears is enormous, and it will require a second Seidlitz to refuse to attack, in spite of the urgent demands of his superiors, because he considers that the right moment has not yet arrived.

The attack on hostile infantry and guns by cavalry has generally failed to produce decisive effects only because too small a force of cavalry has been engaged. Von Bredow's charge at Vionville was made by only six squadrons, but he rode through six batteries and four battalions with comparatively little loss, until he was at length attacked, when exhausted and disordered, by fresh French cavalry. Had Von Bredow been supported by successive

lines in rear, it is impossible to say what might not have happened. The French cavalry would have been met by fresh and formed bodies instead of by exhausted squadrons with tired men and blown horses. Unsupported infantry attacks are rarely successful, why then expect unsupported cavalry to achieve decisive results ?

As an example of the employment of cavalry in masses, we cannot do better than call to mind how the Allies in 1814 defeated the corps of Marmont and Mortier, which were some 22,000 strong, and included 17,000 infantry and 80 guns. The Allies employed 20,000 cavalry and 128 guns, and they were totally unsupported by infantry !

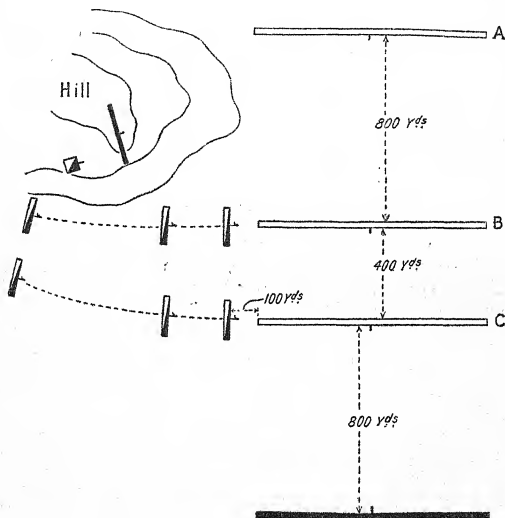
In the cavalry attack on infantry and guns, one great difficulty will be to know when to stop, and what to do next. Modern battlefields are so extensive that cavalry can rarely hope to be able to ride through at the gallop from end to end. Men and horses which are actually engaged soon get exhausted and become an easy prey to fresh troops, and a retirement under fire will inevitably entail very heavy losses.

The close support of fresh bodies of cavalry, following each other at intervals, will give the leading lines the chance of re-forming and enable the attack to be pushed to a conclusion. Cavalry commanders should always inform artillery and infantry commanders that they are about to attack, in order that the artillery may support its advance by fire, and that the infantry may be prepared to advance or to take advantage of the opportunity. Cavalry leaders must be particularly on the look out to notice, and take advantage of, positions where the nature of the ground facilitates a rally, or it may be possible to seize some position where fire action can be employed with advantage. It appears then that open column is a more suitable formation than line, when attacking hostile infantry, or guns, especially as when the force of the attack is exhausted, rallying will be thereby facilitated, and regiments will be less intermixed. For an attack on a large scale, lines of regiments, each in open column, deploying, or at half intervals, seems desirable.

At our manœuvres, cavalry attacks, even on a moderately large scale, against infantry are rarely attempted ; partly because there is generally very little cavalry available, and partly because our cavalry leaders are afraid of the umpires ! The umpires are often unbelievers in the possibility of cavalry attacking infantry,

and what is more, the umpire rules make any such attack very difficult to attempt. For example, let us suppose that cavalry, attacking the flank of successive lines of infantry, attacks the two leading lines with several squadrons in succession, covering the attack by dismounted fire from a hill, as on opposite page.

The diagram shows the position when the cavalry is forced to halt; the leading squadrons having arrived within 100 yards of



the infantry. At this moment the umpire rides up and says to the cavalry leader, "You must retire, as your squadrons are exposed to flanking fire at 800 yards from the infantry at A." It is true that, halted as they are they can be fired at by the infantry at A, but, had it been a real action instead of manœuvres, the infantry at A could not fire without firing into their own infantry at B and C, through which the cavalry would be galloping. It

has, of course, in the above case been presumed that the squadrons during their advance were covered from view of the infantry at A by the hill. Whilst the umpire is talking to the cavalry leader, the infantry at A will probably change front half right and press forward, firing heavily at the cavalry as it retires in accordance with the umpire's decision, and the latter will then feel more than ever sure that he was right in ordering the retirement of the cavalry!

The umpire rules are not in fault, as it is, of course, impossible to provide for every contingency which may arise, but the fault usually lies in the selection of the umpires. The latter should always be picked officers, the best available, instead of, as often happens, calling on commanding officers to nominate so many officers as umpires. The result is they generally nominate their worst officers, *i.e.* those that they can best do without!

The necessity of attacking infantry in successive lines has been insisted upon, because the shock of a single line would produce too transient an effect; unless the leading line is followed by others, the infantry may pull itself together again directly the cavalry have passed, and even perhaps fire into the rear of the cavalry, if it can do so without at the same time firing into its comrades. The squadrons in rear will be more or less covered from view, and by the dust raised by the leading line, and the latter will draw most of the fire; consequently, it by no means follows, even if the leading line is unsuccessful, that the lines following it will not succeed. Whether the cavalry attack should be made with closed ranks, at open files, or in extended order depends on local circumstances; an attack with closed ranks will have both a greater moral and material effect than an attack in open formation, but the latter is the only possible formation if exposed to a heavy fire.

Cavalry when it has ridden through infantry should continue on its course, making for another objective. It must move on in time, so as not to impede the movement of the following lines. It will be well to note the extreme importance of rapid rallying, which should be practised on every possible occasion at field days and manœuvres, so that it becomes a habit which will not be forgotten in action. To bring off a surprise with a large mass of cavalry is difficult, as it takes time to deploy and to get into action, but nevertheless the ground may favour such an enterprise and climatic influences, such as dust, rain, fog, and even moon-

light may give an enterprising cavalry leader the desired opportunity. Above all, when the opportunity arises, let the cavalry be used in force, let us avoid what Sir John Burgoyne calls, "the miserable, doubting, unmilitary policy of employing too few troops in case we should lose men."

What has been said about the attack on infantry applies also to the attack on guns in position. The front swept by modern quick-firing guns may, for all practical purposes, be said to be impassable, but when the guns are already hotly engaged by hostile artillery it is another matter. Guns which are under an effective fire cannot change front to meet a cavalry attack, even if they see it coming. Possibly a few guns on the extreme flank may be brought to bear on the assailants, but they cannot cover a wide front with their fire, and the cavalry should be able to envelop them. In attacking guns it may, or it may not, be desirable to detail some distinct units for the attack on the led horses of the artillery, and on the escort, if there is one; but, as the primary object will generally be to cause the guns to cease firing, it will in such case be advisable to concentrate most of the available force against the guns themselves. It should be borne in mind that even when cavalry have got in amongst the guns, it will be very difficult for horsemen to reach the gunners, who will take cover amongst the guns and limbers: on this account it may be desirable to dismount part at least of the cavalry on reaching the guns, and to attack through them, rifle in hand.

This latter mode of procedure will probably have to be resorted to if it is intended to disable the guns. Cavalry soldiers should be thoroughly taught the methods of disabling guns, as it will rarely be possible to attempt to remove captured guns during a battle.

It is not much use explaining in detail how this can be done, as guns of different nations are not all the same, but, as a general rule, any breech-loading gun can be rendered temporarily useless by burring the screws of the breech action; this can be done with the pickaxes which are usually carried on the limbers. It should be remembered that artillery carry spare parts to replace most of the accessories, so that it is generally of not much use removing those on the guns.

CHAPTER V

DISMOUNTED ACTION

THIS comparatively new, and still much neglected rôle of modern cavalry, is perhaps the most important of all its duties, as on service hardly a day will pass without its being called upon to use its rifles, whereas the opportunities for employing shock action will only be occasional.

Some of the best known authorities on cavalry lay special stress on the desirability of seeking out the opposing cavalry in the early part of a war with the object of bringing it to battle, and defeating it, in order to have a clear field for the operations of their own cavalry.

The desirability of inflicting a severe defeat on the hostile cavalry is sufficiently obvious, but it is by no means clear why it is usually taken for granted that this result can only be brought about by shock action. As it is generally admitted that cavalry cannot, under modern conditions, attack unshaken infantry with any chance of success, it would seem to follow that it would have little better chance of success in attacking dismounted cavalry, or mounted cavalry. There seems to be an idea that dismounted cavalry are not as efficient when acting on foot as infantry. This is probably because cavalry spends so much time practising shock tactics that dismounted action is proportionally neglected, and it is consequently not realised that well-trained and suitably armed cavalry can be used temporarily as infantry.

If the shock action of cavalry is powerless against unshaken infantry, why should it not be equally ineffective against the fire of unshaken cavalry? The latter has the same rifle as the infantry, and should be able to use it equally well; if it cannot, it is the fault of its training, and this is capable of being rectified.

There appears no reason why the hostile independent cavalry should not be destroyed by dismounted action, especially if such action is followed up by a vigorous mounted offensive.

Cavalry which has been trained only with the idea of using cold steel is likely, by its eagerness to close with the hostile cavalry, to advance rashly into positions where it may be taken at a disadvantage, and to be decimated by fire before it can come to grips with the enemy.

In the war in South Africa we found ourselves much handicapped by the mobility of the Boers, and had they known how to take advantage of the reverses to the British arms in the true cavalry spirit, there is little doubt that they might have, in some cases at least, turned these reverses into decisive defeats. The Boers, however, were in no sense cavalry, they were mounted infantry of an irregular type, and they lacked the offensive spirit.

Mounted infantry can never replace cavalry : when mounted it is at the mercy of cavalry, it has neither the training nor weapons which would enable it to seize opportunities of turning a reverse into a rout, it is not so highly trained in reconnaissance, and is deficient in the art of horsemastership. Cavalry can, or at all events should be able to do, all that mounted infantry can do, and a good deal more besides. Nevertheless it is by no means desirable to decry the utility of mounted infantry : it is a most useful support to a cavalry which is numerically weak, it can take over from cavalry some of its duties, such as protection, thus setting the whole of the cavalry free for other duties.

Mounted infantry can be raised and trained quicker than cavalry, and the horses need not be of the same stamp, nor need they be highly trained, as they are only used as a means of locomotion.

The one advantage which mounted infantry has over cavalry is that the former has a bayonet, which will enable it to carry positions by assault after superiority of fire has been established, or for night attacks. The advisability of giving cavalry a bayonet in addition to its other arms is worthy of consideration : a short bayonet, which could also be used as a hunting knife, for cutting brushwood, or for similar purposes, would probably best meet all requirements.

Although a bayonet for cavalry appears desirable, chiefly for use in night attacks, and for occasional use when cavalry is forced to act temporarily as infantry, it would be necessary to be particularly careful to insist that it should be thoroughly recognised that its use would be only exceptional ; the mounted attack with

sabre or lance must always be the normal rôle of cavalry. There is no reason why the cavalry spirit should be lost, or deteriorated, because cavalry is given the means of acting as infantry on special occasions.

As it is impossible to over-estimate the value of mobility, it would seem desirable that the British Army should endeavour to make up for its deficiency in numbers by superior mobility. One man who can come quickly into action, first in one place and then in another, is worth two or three slow-moving foot soldiers. Has this not been proved again and again? Our experiences in South Africa, and in our numerous campaigns on the Indian frontiers, have taught us the necessity of using greatly superior numbers to enable us to overcome our enemy—only because the enemy was more mobile than ourselves.

It has been suggested that in addition to mounted infantry of the existing type, it is desirable to raise, or rather to improvise corps of "mobile riflemen," carried on vehicles.

In all civilised countries, where hostile strategical cavalry is likely to be met, there will be an abundance of roads suitable for the movements of vehicles, and such a mode of conveyance is more economical of horseflesh than mounted infantry in the usual manner.

In India, and in most semi-civilised countries the roads are less numerous, but the open nature of the country will generally permit of wheeled vehicles moving freely across country.

The dismounted rôle of cavalry requires consideration under two headings, viz., offensive action and defensive action, but, before proceeding further, it is as well to insist that the use of fire tactics by cavalry in no sense entails the loss of the cavalry spirit, of the offensive spirit. This spirit must be preserved and encouraged above everything, it is as necessary when acting dismounted as when mounted.

It is generally admitted that when acting on foot the cavalry soldier should have his horse as near to him as possible, so as to be able to utilise his mobility to the fullest extent. This general rule must, however, be departed from when circumstances make it desirable, and it is important that cavalry officers should recognise the occasions when they should work with what General Von Bernhardi calls "Mobile or immobile horses."* Although dismounted cavalry should ordinarily not abandon their horses,

* "Cavalry in Future Wars."

still there can be no doubt that occasions will occur when they must do so. The first essential is that the horses must be kept under cover; on the defensive this is generally easy enough, but on the offensive the horses may have to be abandoned far in rear. If this is the case, the cavalry cease to be cavalry and become infantry for the time being, and their action will be governed by the same rules of procedure as in the infantry combat, but this is not the normal and true method of fulfilling the dismounted rôle of cavalry. On the contrary, the mobility of the horseman must be utilised to the fullest extent, and this cannot be done if the led horses are far behind. They cannot, in fact, be too close, provided that cover for them is available.

Although a mounted cavalry soldier offers a big target to fire, he can advance so rapidly from one cover to another that he is no more likely to be hit than an infantry man advancing over an equal space of ground as less shots can be fired at him.

In the attack the normal dismounted rôle of cavalry should be to advance mounted at a rapid pace from one position to another, pouring in a heavy fire from each successive position, each advance being covered by the fire of other units on the flanks. Cavalry should always use its mobility in such a way that it will envelop or outflank the enemy; part may make a frontal attack, and part gallop away to seize positions from which enfilade fire can be brought to bear, and which threaten the enemy's line of retreat.

It is important that leaders bear in mind the desirability of always bringing as many rifles as possible into action. As advances of this nature will generally be made in extended order, the horses can be "coupled," and every available rifle utilised. It is well to note that although the section leaders of infantry do not themselves take part in the firing, it should not be the same with dismounted cavalry, as in the cavalry the troop is the equivalent to a section of infantry. The cavalry section corresponds to the infantry group.

As cavalry will not, as a general rule, be called upon to take part in a prolonged fire fight, it is not usually necessary to keep supports in hand as in the case of an infantry attack. A reserve may be desirable, but the amount of rifles available is limited, and as many as possible will generally have to be brought into action; a rapid development of fire may produce the desired effect before the enemy has time to bring up his reserves, and,

if the cavalry fails to produce the desired result, it may be able to withdraw, and renew its attack elsewhere, or in another direction.

In the dismounted attack, the cavalry has the option of dismounting by sections (numbers three remaining as horse holders), or it may dismount odd or even numbers, or the whole may dismount and the horses may be coupled or hobbled. In the former case it is generally best for the numbers three to remain *mounted*, as they are then ready to take the horses of their section away to the nearest cover, and to bring them up again when required. If a long wait is probable, the numbers three can be dismounted, when under cover, by order of the commander of the led horses. Dismounting by odd or even numbers will rarely be advisable; if it is desired to utilise only a few rifles, it is much better to dismount one or two troops, so that the remainder are ready and available for employment elsewhere. If the odd or even numbers of a squadron are dismounted, only the equivalent of two troops are available for firing, and the remainder of the squadron is useless for shock action, and almost so for dismounted action, as half the squadron have become horse holders, and tactical unity has been lost. Coupling horses is the best and most generally useful plan. Either two, three, or four horses can be coupled together, according to circumstances. When advancing in extended order, files should not be closed previous to coupling, except to get cover; it is not even necessary to close the horses of a section, but each file, front and rear rank, can couple their horses together; should there be no rear rank man the front rank man can couple his horse to the nearest file on his right.

Because in South Africa the Boer ponies would stand still without being coupled or hobbled, it by no means follows that high-spirited cavalry horses will do the same. Even if they are so taught, they are very easily stampeded by a shell falling near them, or from some other cause. It is a dangerous and undesirable practice, although, when the horses are in low condition from overwork and half rations, as must happen at times in war, they will no doubt be only too glad to stand still, but horses when they have reached this state are hardly likely to be capable of performing the true mounted rôle of cavalry. During dismounted cavalry action it is most important not to relax reconnoitring duties, as the led horses offer a very vulnerable target to fire, or

to the attack of hostile cavalry. Whether a mounted escort to the led horses is necessary or not depends entirely on local circumstances; as with artillery, no escort will generally be necessary when acting in combination with other troops, but in isolated positions, especially when hostile cavalry is in the vicinity, it is another matter.

Some arrangement should always be made for the command of the led horses. It will be found a good plan to put the squadron serrefille in command. He will be responsible to the squadron commander for keeping the horses under cover, for keeping up communication between the led horses and the firing line, and for sending up reserve ammunition when necessary.

For defensive action, cavalry may have mobile or immobile horses, according to circumstances. If a position is to be held strongly with the whole available number of rifles, and a retirement is not intended, the horses may be linked, and left in charge of only one or two men, or they may be coupled. The latter arrangement has the advantage that the men will, if extended along a position, not be so far separated from their horses, but for purposes of utilising cover it may sometimes be necessary to link the horses.

Perhaps the simplest way of linking horses is to order the centre guide to dismount and take off his off stirrup leather; the remainder of the troop then dismount, and take both reins over the horses' heads and hand them to the centre guide who will pass them over his left arm. The horses will thus form a ring round the centre guide, heads inwards, and the latter then passes his stirrup leather through all the reins and buckles it, thus securing them. If the troop is a very strong one, each rank may be linked separately, the centre guide's coverer acting in the same way for the rear rank as the centre guide does for the front rank. It is as well for the centre guide and his coverer to remain in the centre of the rings of horses, to prevent the reins falling on the ground and getting under the horses' hoofs. As some one will always have to be left with led horses, it may be a good plan to arrange that the centre guide and his coverer *always* remain with the led horses, irrespective of the method of dismounting and securing the horses.

If dismounted cavalry is likely to have to mount again, either to advance or to retire, linking horses is most undesirable, as they will not be, as a rule, within reach when wanted, and they cannot

be brought up to the men ; but, if cavalry have to temporarily abandon their horses, in order to seize some position which offers no facilities for attack in the ordinary manner, linking horses may be found useful. It is, of course, evident that if mobile riflemen were available, they would be used in preference to cavalry in an operation of the above nature, as their vehicles would not be immobile, as would be the case with the horses of cavalry, or of ordinary mounted infantry.

Most of the points above referred to are details, but they are details on which the effective working of dismounted cavalry to a considerable extent depends.

The occupation and defence of positions enters so largely into the operations of dismounted cavalry that it may not be out of place to note a few important points which are frequently overlooked.

The extent of a position to be occupied depends in *practice*, though not in theory, on the extent of the position rather than on the number of men available for its defence. It is no use occupying a short front which can quickly and easily be outflanked. In any case the key of the position must be recognised and occupied. The key of a position is usually the most commanding ground, the possession of which enables the holder to bring enfilade fire to bear against the remainder of the position. The chief point is, therefore, to hold all the most commanding points, as a cross-fire can be brought to bear from these points on any intervening ground which is not defended by frontal fire. As regards the exact position of the firing line, a good view of the ground in front is the first consideration ; cover is the next consideration. Section leaders must make sure that every man can *see when lying down* in his fire position.

Advanced posts strengthen a position if judiciously selected ; they should not be more than 700 to 800 yards in front, as otherwise they cannot be well supported by rifle fire from the main position. Commanding positions are only good in so far as they give a good view over the country, and afford cover, especially for supports and reserves. In open country, positions which have only a slight command are the best, as the fire from them is grazing, and consequently more effectual than the plunging fire from high hills ; but such positions must not be themselves commanded, as otherwise they will afford no cover.

In selecting positions it is necessary to bear in mind the purpose

for which the position is to be held : some positions may be good for a stubborn defence but unsuitable as rear guard positions, owing to the difficulty of withdrawing from them unobserved and without loss. For instance, a nullah in an open flat plain is a good position in so far as it affords a good field of fire, good cover, and gives a grazing fire, but it is very difficult to retire from it without considerable loss : the same may be said of positions on the *forward* slopes of hills and ridges. In the occupation of positions there is no more common fault than to see both officers and men giving the position away by showing themselves on the sky-line. Positions should be both occupied and abandoned in such a manner that the movement cannot be detected by the enemy. On the defensive, hasty artificial cover, and improvement of existing cover, should always be, as far as circumstances permit, arranged for directly a position is occupied, and before the enemy comes in sight if possible. In the case of "sangars," or shelter trenches on the *forward* slope of a position, it may often be possible to make brushwood screens leading from the trenches to the rear, under cover of which a retirement can be made without inviting a heavy fire. Cover from view is the next best thing to cover from fire, as it may amount to the same thing.

The entrenching tools carried by each squadron of cavalry on service, on the scale laid down for our Army, are not as useful as they might be. They consist mostly of picks and shovels, but it would rarely happen that dismounted cavalry would require to hold on to a position so long that it would require to dig itself in, and in any case there are not enough tools to do much entrenching. It would seem desirable to replace the greater number of these picks and shovels, especially the latter, by implements for clearing brushwood, light hand axes, wire for making obstacles to block roads at night, wire-nippers, rope for bridging, etc., and the necessary explosives for demolitions.

A light entrenching tool has been invented, which combines a cutting instrument, a saw, and a shovel capable of being used for light entrenching work. This instrument only weighs $1\frac{1}{2}$ lbs., and might with advantage be carried in considerable quantities instead of the ordinary bill-hooks and shovels now carried.

It is hardly necessary to remark that, like all the remainder



of the A echelon of the first line transport, the horse which carries the entrenching tools should be led by a *mounted* man, otherwise they will not keep up with the squadron. Troop reserve ammunition and entrenching tools should *always* be with their squadrons, except during the actual charge, when they should join the reserve.

The very important subject of fire discipline does not receive as much attention in the cavalry as ought to be the case. If squadron commanders would only recognise the fact that fire discipline is far more important than special individual excellence on the rifle range, they might save themselves much trouble, and spend less of their time in attempting to get so many first-class shots and marksmen in their squadrons. An ordinary squadron, composed entirely of first-class shots and marksmen, will not be as effective on service as a squadron of second-class shots who are *thoroughly* in hand, and directed by a capable leader.

Intelligent control and direction of fire will increase its effectiveness to a degree which is rarely appreciated. It is no use allowing the men only to fire at prominent and well-defined targets which may turn out to be only dummies, or at best will usually only be a very small fraction of the enemy's position. The men, if left to themselves will naturally select the easiest targets. The unit commander must examine the enemy's position carefully with his glasses, and direct the fire in turn on to different portions of it. He should be particularly on the alert to observe the forward rushes of his own side, and to cover such advances by directing the fire of his unit on to the point of attack ; such fire will be all the more effective if it is oblique or flanking.

Direction of fire is difficult in cases where there are no clearly defined features of ground, and no visible target ; but it can be assisted by the method of counting the knuckles of the hand, or the spread of the fingers of the hand, when held out to the full extent of the arm. (N.B.—All the men should use the same arm, either right or left, it does not matter which so long as the leader and the men use the same.)

Some easily recognisable point must be selected, and the men told to direct their fire so many knuckles, or fingers spread, to the right or left of the point selected.

Another method is the dial method, *i.e.* the selected point is supposed to be the centre of a clock face, and the men are

told to direct their fire in the direction of, say, five or three o'clock from the selected point. The knuckle method can be combined with the above, say, one knuckle's breadth in the direction of five o'clock.

Fire should be altogether stopped every now and then, with the object of preventing wild firing, and to correct sights, or change the direction or objective of the fire. It should be remembered that the whistle is not much good for stopping the fire, as the men find it difficult to know whether it has been sounded by their own unit commander or by one of the neighbouring units. The order to cease fire can be passed on by troops and section commanders; with a little practice this will be found much the most effective plan. Sudden bursts of fire have a better moral and material effect than a desultory sustained fire.

The range at which fire should be opened against an enemy depends on circumstances; in a rear-guard action, or on any occasion when the chief point is to *delay* his advance, long-range fire should be employed, but, if the object is to surprise the enemy and to inflict severe loss on him, fire at shorter ranges is better. Severe losses in a short space of time will shake his *morale* more than the same amount of casualties spread over a longer period of time. In the case of surprising the enemy by fire, volleys would seem preferable at first, to be followed by independent fire. A few odd shots will give the enemy warning that he has run up against a position, and he may be able to take cover before a heavy fire is brought to bear on him.

When the squadron, or other unit, is already moving in extended order and the order for fire action is given, the men should dismount at once, without closing, retaining their extended formation. In all cases the troop and section commanders must lead the way to the positions to be occupied. Commanders must *lead*, and the men *follow*. Men should not be permitted to rush on in front of their leaders, otherwise sections and troops may become mixed up, and effective command and control will become difficult.

The formation should never be so extended that the men are out of hearing of their section commanders, and the latter should generally be near the centre of their sections, so that they can keep their section under control.

It is the duty of a section leader to assist the troop leader in maintaining fire discipline; he should pass on all orders, should make sure that his men know what target they are to fire at,

should see that his men use the correct sights, and assist them in judging distances.

He should also see that the men do not expend ammunition unnecessarily, and that they maintain the rate of fire ordered. When he has attended to these duties he should himself take part in the firing, but should be on the alert to hear any fresh orders.

The troop will be the normal fire unit. The troop leader will pass on all orders received from the squadron commander. He will not fire himself, but will devote his whole attention to the fire control of his unit, keeping a watchful eye on the movements of the enemy. The squadron commander will be responsible for the tactical situation, and will give orders regarding the objective, range, and nature of fire to be used. He should be accompanied by range finders, who should, without waiting for orders, take ranges and communicate them to him and to the troop leaders.

The question of the supply of reserve ammunition to cavalry is a difficult one. It seems desirable that every man should carry not less than 160 rounds on his person. The bandolier will carry 80 or 90 rounds, and a similar number of rounds can be carried in pouches on the belt.

The troop reserve of ammunition is carried on pack mules; in boxes (two boxes per troop). This arrangement is not satisfactory, especially if the mules are led by men on foot, as is frequently the case, and the boxes take time to open.

Waterproof canvas ammunition carriers, attached to an ordinary pack saddle, have been tried, and found an improvement, as the ammunition is easily and quickly got at when required. Led horses are generally better than mules.

In any case, the reserve ammunition horses, or mules, should be led by mounted men, otherwise they will never keep up, and will not be at hand when wanted.

As the expenditure of ammunition is certain to be very considerable, it is most necessary that cavalry should have its own ammunition columns, both artillery and small arm. These should be organised so that a section can be attached to each brigade.

The employment of machine guns with cavalry is a matter which is deserving of consideration. Although they are intended mostly for use in connection with the dismounted *role* of cavalry, it is also desirable to endeavour to make use of them in the cavalry combat. In order to do so it will generally be advisable to mass

them, and to put them under the command of a specially selected officer, or, in the case of a force larger than a brigade, to mass them in groups, by brigades, each group under an officer.

The manner of their employment in the cavalry combat must depend entirely on local circumstances; they may be utilised as escort to the artillery, but, like the artillery, their target should be the main body of the hostile cavalry, and, if they are left with the guns, the hostile cavalry will very likely be out of their range. It therefore will often be desirable for the machine guns to accompany the cavalry in the first stages of its manœuvres towards the enemy, in order that they may be brought into action against the hostile cavalry at effective range.

In the cavalry combat it is out of the question for commanding officers of regiments to manœuvre their machine gun detachments as separate units, but in the dismounted rôle it will, perhaps, be best to leave such detachment with its own regiment, particularly on the defensive.

For the offensive, the concentrated fire of machine guns on the point, or points, which are selected for the assault, is likely to be most effective.

Much must be left to the initiative of the commanders of machine gun detachments. A good commander will know how to seize opportunities of using them to advantage, but to do so he must be in touch with the plans of the superior commander.

As cavalry will be called upon so frequently to act on foot, it is very necessary to arrange that the cavalryman's equipment shall be suitable and convenient. The method of piling up marching order equipment on the cantle of the saddle is most objectionable, as it makes it difficult to quickly mount or dismount, but this matter will be considered more fully in the chapter on equipment.

CHAPTER VI

THE TRAINING AND INSTRUCTION OF CAVALRY

THE reader may think that there has been a tendency in the preceding pages to lay special stress on the importance of dismounted duties, and to belittle the possibilities of shock tactics. If such an impression has been given, it is only because the author feels that the present-day tendency is rather to sacrifice efficiency in the dismounted *rôles* of cavalry by insisting to an unnecessary extent on the traditional methods of attacking with cold steel. No one can be less anxious than the author to advocate any system of training which will tend towards turning our cavalry into mounted infantry, or of causing it to lose its dash and spirit. No one believes more strongly than the author that cavalry will in future wars, if well handled, be found capable of rendering as great services as it has occasionally rendered in the past. The cause of the failure of modern cavalry to achieve great results has undoubtedly been owing to its training, or, shall we say, want of training. The failure of the Russian cavalry in the recent war in Manchuria was due to the lack of the offensive spirit: it was not cavalry in spirit though it was so in name. Owing to the power of modern firearms, there can be little doubt that opportunities for employing shock action will be less frequent than they were in the past, and, consequently, if the fullest value is to be got out of modern cavalry, it must be capable of acting efficiently in its dismounted *rôle*, without in any way detracting from its usefulness for mounted action. If the right idea is grasped, there should be no loss of efficiency for shock tactics by insisting on a higher standard of excellence when acting dismounted.

Officers will freely admit theoretically that the dismounted *rôle* of cavalry is just as important as its mounted *rôle*, but in practice the latter occupies four-fifths of the time available for

training. It has been suggested that this system of training is encouraged because, on service, the natural inclination is to use the rifle instead of the sword, and, if shock action is not insisted on to a large extent, the cavalry will not be inclined to resort to shock tactics, but will become mounted infantry pure and simple.

To a certain extent this view appears to be justified, but one cannot help feeling that in war it will result in our cavalry attempting to charge when such a course of action offers poor chances of success, and that grave consequences may result: troops will generally do on service what they have been in the habit of doing in peace manœuvres.

All officers are not sufficiently discriminating to be able to judge correctly what course of action is most suitable at the moment, and the present mode of training tends to impress them too much with one idea, that of shock tactics.

Among British officers especially, who are generally fine horsemen, full of dash, and naturally suited for leaders, there should be no fear that the cavalry spirit will be lost, or that cavalry will degenerate into mounted infantry. The national temperament seems rather to lack caution than to lack dash. Would it not therefore be better to equalise the training of both rôles of cavalry, to insist, in fact, on the necessity of doing the right thing at the right time as being the one and only criterion of success?

Although the desirability of striving to attain greater proficiency in dismounted duties has been specially mentioned, shock action must continue to be the chief *raison d'être* of cavalry. Fire action alone may cause a reverse, but not a rout; fire prepares the way for the shock, but it is from the latter that we must expect the most far-reaching results—the utter demoralisation and dispersion of the hostile troops.

Shock action of cavalry *v.* cavalry is plentifully practised, but shock tactics against the other arms receive less attention, and yet, in some ways, they are more open to attack than is the hostile cavalry, as they are more easily surprised.

Umpires should be especially careful not to destroy the initiative of cavalry by giving adverse decisions in cases where circumstances admit of a cavalry attack being successful, they should carefully consider local conditions, and the formations in which the attack is made.

To hold the correct balance between shock and fire tactics seems to be the great difficulty in the employment of modern

cavalry. Even in the seventeenth century, cavalry had resorted to the use of fire tactics as a preliminary to the attack with cold steel. The normal mode of attack was to ride up to, or to await the approach of, the hostile cavalry, and then to fire volleys with pistols before closing to use the sword. The greatest soldiers of the time recognised the baneful effects of such a mode of procedure. Cromwell, Prince Rupert, Gustavus Adolphus, and Frederick the Great all in turn took steps to eradicate this system, which robbed the cavalry of all its dash and *élan*. Even in those days the idea was abroad that the day of cavalry on the battlefield was over, that fire was more efficacious than cold steel, but nevertheless the teaching of Frederick the Great, put into practice by Seidlitz and Ziethen, showed conclusively what cavalry was still capable of performing. Frederick the Great instituted horse artillery to support his cavalry, and Napoleon was a great believer in the necessity of combining fire and shock action. Kellerman's success at Marengo was a typical example of the efficacy of such a mode of action.

So long as the cavalry spirit is maintained there should be no danger in encouraging cavalry to rely on the support of firearms, but fire must be an adjunct to the use of the sabre or lance, and must not be allowed to replace them. A cavalry soldier should always be desirous of getting to close quarters with the enemy, and should be continually on the alert to seize opportunities of doing so, but dash should be tempered by prudence and caution; the power of modern firearms cannot be ignored with impunity, nor must it be underrated. The *desire* to use the sabre or lance should be predominant, but it must be held in restraint by a thorough knowledge of the power of the firearm. When the use of cold steel does not appear feasible, the cavalryman can still display the cavalry spirit in the dismounted rôle: he can handle his rifle and co-operate with the other arms until a favourable opportunity for mounted action occurs. Opportunities may not occur often, but that is all the more reason why the cavalryman should be continually on the alert to seize them when they do occur.

In the cavalry combat the fire effect will be furnished by the horse artillery, machine guns, and also, if possible, by the employment of a force of mounted infantry or mobile riflemen, whilst the cavalry will be held ready to attack with cold steel as soon as the hostile cavalry is shaken by fire, but in the co-operation

of cavalry with the other arms on the battlefield, in turning movements, in the pursuit, and when engaged in protective duties generally, the cavalry may frequently have to rely on its own firearm, otherwise it will have to stand idle, and will fail to make its presence felt.

To rely on shock tactics without the support of firearms is equivalent to throwing away chances of success. However brave and efficient our own cavalry may be, it is foolish to take it for granted that the enemy is not equally efficient, and, if it be true that the occasions when shock action can be utilised will not frequently occur, it is most necessary that our cavalry should be capable of carrying out its dismounted rôle in the most efficient manner.

It seems, therefore, that cavalry should receive quite as much instruction in one branch of its duties as in the other, but that the cavalry spirit, the offensive spirit, should be insisted on in both rôles.

In the British Army, owing to its small numbers, there is a tendency to think in squadrons and regiments rather than in brigades and divisions. If cavalry is to have any decisive effect on the course of a general engagement, or for strategical reconnaissance, it must be used in masses; small units may meet with local successes, but they will not materially affect the results of a war.

Minor tactical operations are possible with the troops available in most garrisons, but larger operations are generally only feasible once a year, during combined manœuvres or cavalry concentration camps. It is, however, possible to work on a much larger scale than is usually done, by utilising flagged troops. Every squadron should have a *fully trained* flag squadron, ready to turn out whenever it is required. It should consist of one officer as squadron leader, four N.C.O.'s as troop leaders, and four troopers as centre guides, the latter carrying flags, also two men for scouting. The above flagged squadron should drill exactly like a real squadron, should take up the proper frontage in line, and the correct depth, or length, when in column. If this is insisted on, there will be no complaints about the flag enemy hiding a brigade behind a haystack, or passing a defile too quickly! As flagged troops can manœuvre more easily and quickly than real troops, they should never be allowed to move faster than the trot, except when working together with real troops, when they will, of course, adopt the same pace as the latter.

For dismounted action the horses can be coupled, and the centre guides can use their rifles, handing the flags over to the troop leaders, who will wave them to and fro so as to mark the position of the firing line.

In using flagged troops together with real troops the former should always, as far as possible, form the supports or reserves. Skeleton enemies, represented by flags, should always be commanded by *experienced* officers, and should also be accompanied by umpires to prevent them moving too quickly, or in an unreal manner.

Flag enemies should never be deprived of all initiative, but should be given a free hand to work as if they were real troops, provided that they do so with due regard to pace and formations. They should never be permitted to act in an unreal manner, or to attempt impossible manoeuvres. Slackness in enforcing these matters, and putting young and inexperienced officers in command of skeleton enemies, are the causes of the poor results that are so often obtained when utilising this more or less indispensable form of instruction.

Manoeuvres on a large scale are more instructive to the leaders and higher commanders than to the men in the ranks, and for this reason they are necessary, as it is of the utmost importance that commanders should have experience in the handling of large bodies of troops, but, owing to the natural desire of commanders to better their opponent, the actual instruction of the rank and file is to a certain extent sacrificed. There is often no time to thoroughly explain to the men what is going on, and the objects in view, and they consequently are apt to get bored and become slack. The rank and file no doubt get plenty of good healthy exercise, and acquire a certain familiarity with the shifts and exigencies of camp life, but they learn less from a tactical point of view than in minor operations, where the whole aim and object in view is the instruction of the men. Large concentrations of troops cannot take place frequently, owing to the expense involved, and it therefore becomes necessary to devise some other method to supplement the instruction of leaders and higher commanders.

Staff rides, regimental tours, or brigade and divisional exercises of a similar nature have to take the place of manoeuvres, and they can sometimes be made more realistic and interesting by utilising flagged forces instead of having only imaginary troops. The

younger officers and non-commissioned officers will thereby get some practice in commanding larger units than they would usually command at ordinary field days or manoeuvres, which cannot fail to be of use to them, and they will one and all be able to take an intelligent interest in what is going on.

Operations on an extended scale, such as can be practised at staff rides, especially if at least part of the troops are represented by skeleton forces, are the more necessary because cavalry officers must have a grasp of strategical requirements in order to carry out their duties in an efficient and intelligent manner. They must be able to recognise what information the commander-in-chief would want, what information is important and what superfluous, and to draw just conclusions from the facts they may have observed.

Staff rides are perhaps the best available means of giving officers theoretical instruction in the larger operations of war, without which knowledge they will fail to do what is expected of them. The term "Staff Ride" is, however, in some cases a misnomer, as the work should not generally be confined to staff duties, but should include the duties of commanders of units down to that of the squadron, or sometimes even smaller units, such as the movements and operations of strategical patrols.

The foundation of all cavalry efficiency is squadron training. A good squadron commander who trains his men for war, and not for "eyewash," or inspection purposes, will be able to turn out a squadron which will do credit to his teaching on service, though it may be overlooked, or considered no better than others, at inspections.

Squadron commanders should be careful not to waste time in teaching men details which are of no practical use to them, and, in explaining any subject, the officer should appeal to the intelligence of the men by pointing out the reasons for or against any line of action. Officers must use their imagination, and try to think out for themselves what points they would wish their men to know if they were on active service.

A considerable amount of theoretical instruction should be given in addition to practical work, men should know the theory before putting it in practice. Commanding officers should, without undue interference, supervise the work which is being carried on in the squadrons, and should assist squadron commanders by giving them ideas for their consideration, or pointing out any

faults which are apparently being overlooked. A commanding officer is not intended to sit down and do nothing except criticise the results of the squadron training, but he should do all in his power to *assist* his squadron commanders, especially when he sees that they require assistance.

The period devoted annually to squadron training should never be curtailed, as, if the men do not get individual instruction in their own squadrons, they are not likely to get it at all. Instruction in regimental, brigade, and divisional work gets gradually more remote from the men in the ranks. On regimental parades, the commanding officers' comments are addressed chiefly to officers, and probably to the senior N.C.O.'s; on brigade parades, the brigadier probably only addresses his remarks to officers, and in divisional work often only the senior officers are brought in contact with the commander.

In all cases, however, the senior officer, should, as far as possible, take steps to ensure that instruction is as widely disseminated as circumstances permit. Commanding officers should, for instance, at the conclusion of a regimental field day call up all officers *and* N.C.O.'s, and explain what faults he noticed, and ask individuals *why* they did such and such a thing? Criticism should be in a friendly spirit with a view to encouraging men to think and act for themselves. Harsh words do no good, and only arouse a spirit of antagonism, which is most undesirable.

To be of use, criticisms of work done in the field should be made on the spot, immediately after the conclusion of the field day, or better still immediately after each phase of the operations.

Written comments are usually issued too late to be of much use. At manœuvres, where operations are being carried on continuously day after day, it is quite useless issuing written comments unless they can be given out on the evening of the day in question, as, if issued later, the events of the following day will obliterate the events of the preceding day from memory. The above is one of the drawbacks of big manœuvres; there is neither time to explain the object or plan of operations beforehand nor the result or mistakes afterwards. As troops are liable to be called out for war at any moment, and not only at the conclusion of the drill season, it appears desirable that field days, for the combined work of all arms, should be held throughout the drill season, say, once a week, so as not to unduly interfere with the regular routine of training. An exception might be made in the case of squadrons

at Squadron training, which should be excused. Squadron training should be followed by regimental training, which can generally be most advantageously carried out in camp, and then by brigade training, to be followed later on by either divisional work or combined manœuvres, and, in addition, by staff rides.

No parade or field day should ever be permitted which partakes of the nature of a set-piece: a parade should either be a drill pure and simple, or else manœuvres. In the latter case; general and special ideas must be issued, and each commander given a free hand to act as he thinks best.

Ordinary combined manœuvres, unless on an exceptionally large scale, give little opportunity for practising the larger and more important duties which cavalry will be called upon to perform in war. Strategical reconnaissance, strategic advanced guards, and pursuits can generally only be practised at cavalry divisional manœuvres, and then only with difficulty, as it is generally impossible to represent the enemy in any adequate manner. Instead of *concentrating* large masses of cavalry in camps of instruction, it would be better to operate from separate bases against each other. For example, suppose A, B, and C are garrison towns. A and B are in the north, and C fifty miles to the southward. A and B have each two regiments of cavalry and C has three. The regiments at A and B can, by the use of their flag squadrons, to which reference has been previously made, put into the field a force of eight regiments, which can be organised into two or three brigades, as desired, whilst the regiments at C can similarly furnish two brigades. The flag regiments and the real regiments must be combined to form brigades, and the former, as far as possible, should form the reserves, or main bodies, whilst the latter do all the reconnoitring and protective duties.

Regiments which are in reserve, or main bodies, get little instruction at manœuvres, and for this reason the flag regiments should always be detailed for such work. By this arrangement cavalry operations on a considerable scale can be carried out with a comparatively small number of troops, and the operations are of a more extended and practical character.

The employment of some flagged troops is always desirable, in order to prevent each side knowing the exact strength of the enemy. Manœuvres often are unrealistic because each side knows for a certainty what the strength and composition of the

force opposing it is, and the commanders consequently act in a manner which they would not do in the fog of war.

In peace manœuvres the opposing cavalries usually more or less neutralise one another, which is often the result of faulty decisions given by the umpires. If one of the opponents is held to have defeated the other, the victor should be allowed to follow up his success, and to reap the fruits of victory, instead of, as generally happens, being obliged to halt and do nothing, in order to allow the other side to get away.

The defeated cavalry usually retires, and then comes into action again at the first available position, thus *again* meeting the victor on equal terms, and probably holding him up, and preventing him getting any advantage out of his victory. For manœuvre purposes, beaten cavalry should retire at the trot, followed by the victor (at a distance of 100 yards or so) until the former is supported by fresh troops in adequate numbers, or so posted, as to be able to check the pursuit.

The victor should have a free hand to do as he thinks best, and the beaten cavalry should also, unless it is pursued in adequate force, be allowed to act in such a manner as seems good to its commander.

If one of the opposing cavalries is adjudged to have been practically wiped out by fire, it should be *sent back to join the main body of its force*, and not be allowed to come into action again for some considerable time.

Unless some such arrangements are made, cavalry commanders will not sufficiently realise the importance of striving to gain a tactical success, nor will they get into the habit of looking upon success in action as merely the first step towards the execution of their *role* in war.

The important duties of cavalry can often only *begin* after the opposing cavalry has been defeated.

CHAPTER VII

THE COMMAND AND LEADING OF CAVALRY

THE command and leading of cavalry must be learnt by practice. It is impossible to give much help in the matter of how to command, but there are some points to which attention may be drawn.

A commander must be confident in himself, and such confidence can only come from a thorough knowledge of his profession, and from confidence in the efficiency and *morale* of those under his command.

The cavalry combat is perhaps the most difficult of any operation which a commander may be called upon to carry out. In the presence of the enemy it is specially necessary to avoid any premature issue of orders, as, when the cavalry once commences to manœuvre with the object of attacking the hostile cavalry, it is generally impossible to cancel the orders in time, or to make fresh dispositions. To use a slang phrase, it is generally best to "sit tight" until the opportunity for action occurs, and not to be in too great a hurry to bring on an action. Counter-orders are apt to shake the confidence of the troops in their commander, and it is sometimes advisable to carry through the original plan, even if subsequent events show that it is faulty. Vigorous execution will often more than compensate for faulty conception. Although it is a well-known maxim to keep troops concentrated rather than dispersed, it is necessary, especially in the presence of hostile cavalry, not to overdo concentration. A *sufficient* number of troops must be used for protective duties, to keep hostile scouts at a distance, otherwise it will be impossible to surprise the enemy, or to take him at a disadvantage. It is necessary to conceal both your strength and position from him at all costs. What constitutes a sufficient number depends on circumstances, but in any case they should if possible be stronger,

or more advantageously posted, than those of the enemy, otherwise the enemy will drive in your protective troops and probably locate your position. When hostile troops are in contact, it will often be necessary to *fight* for intelligence. If it is not to be acquired by other means, the hostile protective troops must be driven in, so that the enemy will be compelled to disclose his main forces. In all tactical operations it is most necessary that the commander should ride on well to the front in the direction of the enemy, in order to be in a position to see as much as possible for himself, and to thus verify the reports which he may receive from his subordinates. A commander will find it useful to detail one of his aides-de-camp as his observing officer; the latter should continually have his binoculars in his hand, and should keep his chief informed of everything he sees.

There is no fault so bad as that of the leader hugging his command too closely. If he is well to the front he has time to make up his mind what he is going to do, and to bring up his troops in such a manner as will best suit his purpose, without the enemy having seen them. It is not, of course, suggested that a commander should go outside the zone which is in possession of his advanced troops, otherwise he would risk being captured, but he should push on as far as he can, and utilise all positions which give him a commanding view over the country in the direction of the enemy.

It will therefore be necessary to place the next senior officer in executive command during his absence.

The above system of command is equally applicable to all bodies, from a single troop to a division, when acting as an independent unit.

Commanders when they go to the front should, as a rule, leave their staff behind at the head of the troops they are commanding, or else should let it follow at a distance of several hundred yards, as the staff being necessarily numerous raises a dust, or gives the presence of the commander away, and will certainly draw the fire of the enemy.

The commander will not usually require more than one staff officer, an A.D.C., and a galloper with him; the remainder should be put under the orders of an officer, who should make it his business to keep it under cover as far as circumstances permit. In the absence of the commander, the senior staff officer will read all messages that come for the former and

immediately forward them to him. The commander's flag should remain with the staff.

When the commander from his forward position has appreciated the situation, and made his plans, he should then send back to call up his subordinate commanders (brigadiers in the case of a division, commanding officers in the case of a brigade, and squadron commanders in the case of a regiment), so that they may see as much of the situation as possible, and that he may explain his plans to them. Having done so, they will quickly rejoin their units and proceed to put the plan into execution.

One of the most difficult things for a commander to realise is that his subordinates have not the same amount of information at their disposal as he has, and unless the situation is *thoroughly* explained the commander's plans are apt to be upset by the acts of his subordinates, who, though possibly acting for the best, according to their knowledge of the situation, may nevertheless not be acting in accordance with the plans of the commander.

When divisional or brigade commanders call up their brigadiers or commanding officers, as the case may be, they should also send for the artillery and machine-gun commanders, and for the commander of any mounted infantry which may be attached to the force. Should any of the commanders receive no orders for the immediate employment of their unit, they should remain with the commander, and may with advantage remind him occasionally of their presence, should they have reason to think that the employment of their unit has been overlooked.

As a general rule, it is certainly advantageous to form up the troops in a position of assembly, under cover, previous to the commencement of an action; what is called an encounter battle should be avoided if possible.

An encounter battle generally means that one or both sides rush into action without any definite plan of operations, without waiting to concentrate their forces, or to reconnoitre, and the result must depend on luck, or on the superior *morale* of one of the combatants.

Although positions of assembly are desirable before committing troops to an action, there is a limit to the numbers that should be concentrated in any one spot. A division of two or three brigades is probably about the largest force that should be brought together in assembly formation, as larger bodies will take

too long to deploy, and the opportunity for effective action may be lost. In the case of the employment of larger masses of cavalry, each division should have its own position of assembly, so that deploying intervals and freedom of movement are maintained. The positions of assembly should also be so situated that concentric action against the enemy will be facilitated, or, in other words, the enemy's position should be enveloped by our own positions.

Positions of assembly must be adequately screened from the observation of hostile patrols and scouts by the employment of protective troops: the advanced guard may not be sufficient for this purpose, or it may have already commenced its manœuvring rôle and be fully occupied by the enemy, consequently it is generally necessary when the hostile forces get into touch with one another, and a fight seems imminent, to send out fresh, and perhaps even stronger, protective detachments. Advanced guards should not as a rule, when an action is imminent, fall back towards the main body, but should retire to a flank, so as to clear the front, and be in a favourable position to act offensively in combination with the attack of the main body.

It is generally a mistake for a cavalry commander to be in too great a hurry to attack hostile cavalry. A premature opening of artillery fire is likely to result in checking the enemy's advance, which is undesirable if the commander wishes to bring his opponent to battle. The commander's chief aim will be to induce the enemy to come out into the open, to draw him on to fight on ground of his own choosing. Unless a commander knows the country well, it is always dangerous to advance to attack over ground which cannot be reconnoitred owing to its being within the zone held by the hostile advanced detachments. Although the ground may appear suitable for the mounted action of cavalry, there may be ravines, ditches, or wire fences which are not visible until one is right on to them.

It is not an advantage to be the first to open artillery fire unless it can fire on the opposing cavalry at *decisive* ranges. If this condition is not fulfilled, it will have given away its position, probably without doing the enemy much damage, and the latter will then be in a position to manœuvre in such a manner as to avoid its fire in advancing to the attack. When the position of the hostile artillery has been located it becomes much easier to arrange a plan of attack. It is also no advantage to be the

first to launch the cavalry to the attack, unless by so doing you can catch the hostile cavalry in the act of deployment; on the contrary, the later the deployment takes place the better, as the enemy will be so much the longer under artillery fire, and the cavalry can continue to manœuvre to take the enemy at a disadvantage up till the last moment.

In the tactical handling of cavalry, every commander should have a second-in-command to assist him, and to take executive command in his temporary absences for personal reconnaissance, or to replace him should he be disabled.

The above applies equally to every unit from the division down to the squadron.

In the presence of the enemy, and when manœuvring previous to the attack, commanding officers will have to keep in the vicinity of their brigadiers, in order to be in a position to receive orders, or see signals, as well as to be able to see the ground in the direction of the enemy; the seconds-in-command of regiments must therefore ride in such a position as to divide the space between their commanding officer and the regiment, so as to pass on orders, and, in fact, take executive command when the commanding officer is too far off to make himself heard. In like manner squadron commanders will have to ride within hearing distance of the second-in-command, and the seconds-in-command of squadrons should ride half way between their squadron commanders and their squadrons.

In the case of the larger units, like divisions or brigades, the second-in-command would generally be in executive command during the absence of the commander with the more advanced troops; but when the troops are formed up in a position of assembly, and the commander calls up brigadiers, or commanding officers, to explain his plan of attack, he will also join him.

The commander might put him in command of part of the attacking force whilst he himself remained with the reserve, or he might retain him with him pending emergencies.

Events take place so quickly in a cavalry action that any casualties amongst the higher commanders are apt to result in grave consequences if their successors are not immediately at hand to replace them.

When a cavalry engagement is imminent, the enemy is more than likely to detail special squadrons to fire on the hostile staff, or at all events to drive it back from a position of vantage,

hence the necessity of keeping staffs as small as possible, and avoiding observation to the utmost extent possible.

In the cavalry combat the first consideration for the commander is to combine fire and shock action ; to utilise his horse artillery, machine-guns, and any mounted rifles he may have to the greatest possible extent. His aim should be to avoid masking his own guns during the manœuvring stage immediately preceding the attack, and to manœuvre in such a way that the enemy will be forced to mask his guns.

Cherfils ("Dynamique du Combat de Cavalerie") and De Brack both suggest the advisability of taking the enemy at a disadvantage by operating in such a manner as to cause him to gallop too soon, and so get into disorder. To bring this about the former recommends the attack in echelon. He lays stress on the fact that we should not be afraid of the enemy overlapping our first line. From the front, and from a distance, it is generally impossible to see whether cavalry is in line or echelon. If the enemy's first line is stronger, and outflanks our first line, his flank squadrons wheeling inwards against the flanks of our first line will be taken in flank themselves by our echelons in rear, or, if they do not wheel but come straight on, they are likely to get into disorder through having commenced the gallop too soon. In all cases the commander *must* keep reserves, as a cavalry combat will generally result in victory to the commander who has still a reserve in hand after the enemy has thrown in his last reserves.

Clausewitz has very truly said that "in war only the simple secures success." This is a maxim which cavalry officers should take to heart, as there is a tendency in some quarters to indulge in too complicated manœuvres. If such manœuvres rarely come off even in peace, how can we expect them to be successful in war !

Cavalry commanders should generally exercise control over their artillery commanders, especially in cases where they have not been in the *habit* of working together, and the latter is consequently not familiar with the commander's methods. For the cavalry combat, the use of indirect fire by horse artillery should be the exception, not the rule. Indirect fire is rarely permissible in the support of the cavalry charge. Direct fire is quicker and more effective against a rapidly moving target, and the artillery will also be in a better position to defend itself if attacked by

hostile cavalry when using direct fire. Should the hostile batteries be the first to come into action in the open, part of the artillery may take them on from a covered position, using indirect fire, whilst the *greater* part of the artillery moves on with the cavalry, which will then manœuvre so as to cause the hostile cavalry to mask its own guns in the combat. The hostile cavalry, and *not* the hostile guns, are the true objective for artillery fire. If the cavalry is defeated his guns must either retire or be captured.

As a general rule, when the artillery has been ordered to come into action against the hostile cavalry, the cavalry will move away to a flank of the guns, and not ride *forward* to meet the enemy, as the latter must be kept under fire as long as possible before the shock occurs, which will not be the case if the cavalry moves forward. Forming line for attack to a flank instead of on the head of the column will give the commander the advantage of being able to manœuvre until the last possible moment.

The superior commander should not himself take part in the attack. He should place himself in such a position that he has the best possible view over the battlefield, and should watch the course of events intently. When he has once despatched his cavalry to the attack he can then only influence the action by throwing in his reserves to the best advantage. Consequently his reserve troops should be near him, so that orders can reach them quickly. As a general rule the commander of the reserves should be with him.

It is, generally speaking, useless to attempt to handle large masses of cavalry by purely drill methods : the brigade is probably the largest unit which can be handled in such a manner, and the superior commander must therefore delegate the actual execution of the attack to his subordinate commanders. He himself cannot accompany the attacking force without losing his grasp of the general situation. To use Stonewall Jackson's words, a commander should always do his best to "mystify and mislead" the enemy ; his endeavour must be to get the enemy to make a mistake, and to then promptly take advantage of it. Cunning and slinness are necessary, though perhaps not very common attributes of modern, civilised commanders ! Reference has previously been made to the desirability of having strong advanced guards, with the object of securing an extended zone of intelligence, but here again the necessity of a strong advanced guard

becomes evident, for it is usually only by the manœuvres of the latter that the enemy can be misled.

The advanced guard, when it has obtained intelligence of the strength and dispositions of the hostile cavalry, will cease to be an advanced guard, and commence its manœuvring rôle, with the object of deceiving the enemy, leading him on in pursuit, drawing his fire, or otherwise causing him to expose himself to your attack. This being so, it is very necessary that the superior commander should be in close communication with the advanced guard commander. In fact, when contact with the enemy is established, the superior commander may with advantage join the advanced guard commander, and explain what he wants done before rejoining his command to give his orders for the attack.

A commander should have what General Von Bernhardt calls a "complete intellectual command of the situation." * Not only of the local tactical situation, but of the general and strategical situation. He should carry the map of the theatre of operations in his head, and should consider the larger issues involved as well as the actual tactical problem. The fruits of strategy can, however, only be gathered by tactical success, therefore to beat the enemy in battle is the first consideration: to do this, the utilisation of the ground to the best advantage is the chief essential. A knowledge of the ground can often only be obtained by rapid, hard riding on the part of the commander. Big scale maps will not be available, and even if they were there would probably be no time to study them. Energy, activity, and endurance are therefore essential qualities in a cavalry commander. That horsemanship is equally necessary goes without saying, but luckily our cavalry officers are generally so much at home in the saddle that the possibility of meeting a cavalry leader who is not a proficient horseman hardly occurs to one. No officer who is not thoroughly at home in his saddle should ever be in command of cavalry, as otherwise he will not be able to give his whole attention to his duties as a commander.

It is important that all officers should keep in mind the limits of their command. A divisional commander should not, except under special and urgent circumstances, give orders to a smaller unit than a brigadier; a brigade should not give orders to a smaller unit than a regiment, and the commanding officer of a

* "Cavalry in Future Wars."

regiment to a smaller unit than a squadron. The above is a generally recognised and well-known principle, but in practice it is often not observed, and leads to confusion, causes divided responsibility, and loss of tactical unity.

On the field of battle, when acting in combination with the other arms, the cavalry will generally, if possible, take up a position of observation to the front of one of the flanks of the army, where it will be best placed to operate against the flank and rear of the enemy, to meet the enterprises of the hostile cavalry, or to take up the pursuit on parallel lines, should the enemy be defeated. The commander should do everything in his power to keep in communication with headquarters, and to keep himself informed of what is going on in other parts of the field of battle. How this may best be arranged depends on circumstances, but it will generally be a good plan for the commander to detail one of his own staff to remain with headquarters with the special mission of keeping him fully informed as to the progress of events. In like manner, during all operations, the commander of an independent, or detached force, will usually find it convenient to tell off one of his staff officers solely for the duty of writing reports for him, and for arranging to keep up communications with headquarters and detachments, as he is likely to be himself fully employed in keeping in touch with the tactical situation.

Cavalry leaders must never wait for orders to attack from army headquarters, as the opportunities of doing so are fleeting, and if not promptly seized may not occur again. The leader himself must be the best judge of whether "such action is fully justified by the prospects of success," but, now that cavalry is armed with the rifle, there can be no excuse for its remaining idle; it can always play a part in the operations in hand, even if no opportunity occurs for the use of cold steel. The commander must constantly seek for such opportunities, and this he can best do by keeping in a forward position. Whether a cavalry commander is justified in disregarding the urgent orders of a superior commander to attack depends upon circumstances, which circumstances are referred to in our "Field Service Regulations," but it is certain that only the man on the spot is capable of judging the moment for attack, and if he is a Seidlitz, he will be prepared to bear the responsibility of acting on his own judgment.

The employment of trumpet calls on service, as a means of

manceuvring, are uncertain and dangerous. Calls may not be heard, or may be misunderstood, and a wily enemy may sound calls with the object of making his opponents' troops make a wrong move at a critical moment. Signals are only suitable when employing comparatively small bodies of troops, as they cannot be seen distinctly from a distance, and may, even if seen, be misinterpreted. The safest plan for giving orders to cavalry which is on the move, is by verbal messages conveyed by gallopers; Each regiment of a brigade should supply the brigadier with an officer for this duty, and a divisional commander should have two similar officers detailed from each brigade under his command.

With cavalry it is of special importance that it should be commanded in war by the officer under whom it has been serving in peace time. Every one throughout the command will then be intimately acquainted with the methods of the commander, and will know what to expect, and how to act, thus minimising the possibilities of mistakes which may, in a cavalry combat especially, result in grave consequences.

Cavalry leaders should strive by every means in their power to make themselves thoroughly efficient, and fit to undertake the onerous duties that must necessarily fall to their lot in war. They should realise that in the cavalry branch success depends chiefly on the ability of the commander.

However efficient the cavalry itself may be, it will not give a good account of itself unless handled by a commander who thoroughly realises the possibilities and limitations of the arm, who is possessed of the cavalry spirit, and is capable of inspiring those under his command with this spirit.

CHAPTER VIII

HORSES AND EQUIPMENT

ALTHOUGH numerous points regarding the equipment of cavalry have been referred to in the preceding chapters, there are others which equally deserve our attention. Perhaps the most important are the questions of horse supply, and of how to reduce the weight carried by the horse.

Great endeavours have undoubtedly been made in some quarters to reduce weight, but the outcome of them is somewhat disappointing, as most cavalry still ride what may be called almost prohibitive weights; weights which are in most instances considerably above the carrying capacity of the class of horse used.

Nevertheless, the larger and more powerful class of horse, which is really up to these weights, is unsuitable for campaigning. Such a horse requires careful nursing, good feeding, and stabling, all of which are more or less impossible in war. Undoubtedly the hardest horse in the world for purposes of war is the arab; he will not only live but thrive on forage that would soon render the majority of horses unfit for work. He appears to stand either heat or cold equally well. During the last expedition to China arab horses of the Indian cavalry stood the winter of Northern China perfectly, and in India they stand the heat and hard ground better than any other breed. An arab standing 14.2 may be seen carrying his fifteen stone all day in the sun, and come in almost as fresh as he went out, but it must be remembered that he is travelling on the top of the ground—on the hard and not through heavy mud, as would often be the case in Europe.

Australian horses, if of the right stamp, are by no means to be despised, especially if they have been bred from arab sires, as is nowadays not infrequently the case. The Indian stud-bred horse, particularly those with arab blood in their veins, is often a

useful animal, though a good many Indian country-breeds are far from being ideal troop horses.

English horses of the right type are hard to beat, but they are unsuitable for campaigning in tropical climates, unless carefully acclimatised for about a year, as they can neither stand the hard ground nor the heat; but this also applies, though perhaps in a lesser degree, to the Australian.

There is little doubt that small horses and ponies are capable of more work than the larger breeds: the former seem so have more vitality and stamina, perhaps because, taking them all round, the smaller horses are the better bred ones: blood is the most necessary quality in a weight-carrier.

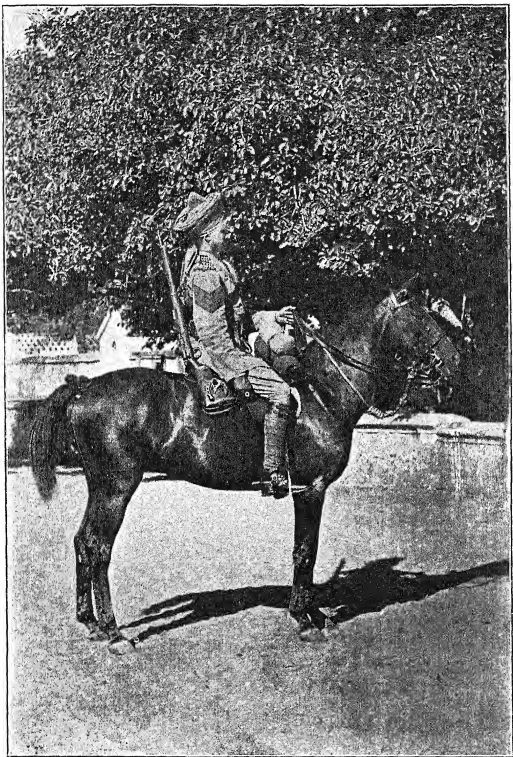
The fact seems to be that all horses are good troop horses provided that they have sufficient quality, and are of the right make and shape.

Troop horses, of whatever breed, should be short-backed, with strong loins, and well ribbed up. Many otherwise good horses are rejected because they are not up to the standard as regards leg measurement below the knee, but experience does not seem to bear out the fact that such horses do their work any less well than horses which have more bone. For the price which is paid for a troop horse one cannot get everything, and it therefore seems a pity to reject an otherwise suitable animal because he is a little deficient in bone. Good shoulders and a well set on head and neck are an absolute necessity for horses which are to be trained up to the required standard of handiness. It is a remarkable fact that in a country where horses are so much used as in England, the generality of men do not know what a well-broken horse is.

Horses are rarely systematically trained; they are capable of being ridden, and they do their work, but they have no manners, they are not *trained* horses.

In case of mobilisation the horses which would be forthcoming in England to fill up the cadres to war strength would not be, with few exceptions, fit to put into the ranks of a cavalry regiment, though they would do for draught purposes, or for mounted infantry.

In the war of 1870 the Germans experienced the drawbacks of having "augmentation" horses in the ranks to a considerable extent, and the majority of them were broken down and useless within six weeks after the commencement of operations.



THE AUTHOR'S PATTERN RIFLE-CARRYING EQUIPMENT (MOUNTED).

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After the earlier phases of the war in South Africa, dating perhaps from the relief of Kimberley, the British cavalry were no longer capable of acting as cavalry, or rather as cavalry which intends to use shock tactics, owing to the poor condition of the horses.

Horses taken into hard work immediately after a long sea voyage were naturally incapable of standing the strain of a campaign, and the remounts which were collected from all corners of the Empire, and even from countries outside its limits, were in many cases unbroken, or practically unbroken, and were also often horses which had previously been entirely grass fed, and which had no condition.

This is what happens in a big war: how then is cavalry to be kept up to war strength when it has taken the field; how are casualties to be replaced? There may be, and probably are, sufficient horses available, of the right stamp and in hard condition, to bring up the cavalry to war strength on mobilisation, but there is no reserve to fall back upon to keep it up to war strength afterwards.

Remounts will be required by an army in the field almost at once; there will be no time to train and condition raw horses, as this will at the very lowest estimate take six months, and the war may be over by that time!

Some arrangement is absolutely necessary to provide these horses: otherwise, after the first few weeks of a great war, the cavalry will have no choice but to act as mounted infantry, on raw and ill-conditioned animals.

In India the Government Remount Depôts, and the Depôt squadrons of the Indian Cavalry, give a reserve, though not altogether an adequate one, but no such reserve is available at home.*

It would seem most desirable that Government should take the matter in hand, and institute some breeding and remount depôts, as is done by every other Continental Power.

The troop horse for cavalry should be bred, as in the South of France, from arab sires only, and a number of such sires should also be distributed throughout England, Wales, and Ireland, so as to encourage the breeding of the class of horse wanted, viz. horses from 14.3 to 15.2 hands high, and of the right stamp and

* Except the recently sanctioned Cavalry Depôts, which are a move in the right direction.

blood. These horses might be thoroughly trained at remount dépôts, and then handed over to mounted infantry, on the understanding that they will be withdrawn for the use of the regular cavalry if required, and be replaced by "augmentation" horses, *i.e.* horses that would be purchased by Government on mobilisation.

Thoroughly broken cavalry horses would not be required for home defence, as the nature of the country prevents the employment of shock tactics, and ordinary horses are good enough for mounted infantry work.

As has been previously said, it has been found practically impossible to reduce the weight to be carried below a certain point.

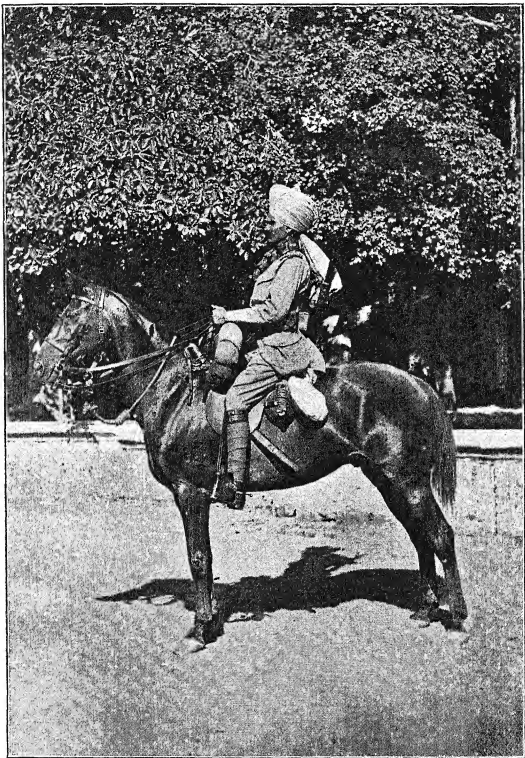
A man's saddlery, head-rope and peg, rifle, sword, bandolier, belt, and ammunition weighs four stone alone, even when every article is of the lightest.

It may be taken as certain that it is impossible for the lightest cavalry, such as that of the Indian Army, to ride less than 14½ stone, or for Hussars to ride under 15½ stone, even when turning out as light as possible, without cloaks, cornsack, etc.; but, as a general rule, cavalry will have to ride heavier than this, as it is rarely advisable on service to have these articles carried with the baggage. Cavalry, if it is to perform its rôle effectively, should be prepared to dispense with its baggage temporarily, and this it cannot do unless the necessities of life for man and horse are carried on the horse.

It has been recommended that such articles as cloaks, picquetting gear, and corn for the horse should be carried on pack horses to accompany the cavalry; but such an arrangement hardly seems to be desirable, as led horses are an impediment to mobility—men who would otherwise be in the ranks are required to lead them, and they are liable to get left behind and not to be forthcoming when required. It may, however, be sometimes desirable to carry those articles on pack animals with the first line transport.

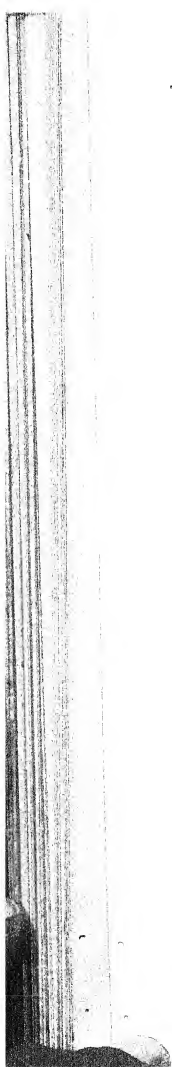
The reserve ammunition and entrenching tool horses are absolutely necessary with the cavalry during operations, but it is undesirable to have others as well, if it can be avoided.

Although the weights carried by troop horses in field service order are necessarily high, there is no reason for alarm, as we may be quite sure that the horses of any possible European enemy will be carrying at least as much, and probably more.



THE AUTHOR'S PATTERN RIFLE-CARRYING EQUIPMENT (MOUNTED).

N.B.—In above field service order, ten pounds of corn are carried; eight pounds in corn sack (over the cloak) and two pounds in the nosebag. The hand rubber and small towel is carried also in the nosebag. Head and heel-ropes and one iron peg are carried, the latter on the fans of the side bars. The spare shoe (and nails) and shoe pick are carried outside of the rifle bucket. Aluminium water-bottle. No wallets, no surcingle, no shoe-case. Shackle on head-ropes. Headstall made very light. Folded blanket under the saddle.



All that is therefore necessary is to see that the weight does not exceed the irreducible minimum, and to equip men who are sent on special duties, such as scouts and despatch riders, as lightly as possible.

As the cavalry soldier's saddlery and weapons alone weigh 4 stone, and the extra weight of cornsack (filled), cloak, water-bottle, canteen, etc, amounts to another 17 to 20 lbs., it is evident that a Hussar weighing, say, 11 stone in his uniform, cannot ride under 16 to 16½ stone in full marching order. Our Indian cavalry can ride at weights varying from 14½ to 15½ stone, according to the class of man enlisted. If we then call 12 stone the weight of a medium cavalryman (in uniform), and 11 stone the weight of a light cavalryman, the irreducible minimum works out at 17½ stone for medium cavalry, 16½ stone for light cavalry, and from 14½ to 15½ stone for Indian cavalry.

In some corps this most important matter has not received the attention it deserves, and the above weights are considerably exceeded.

The men should be got into the habit of never sitting on their horses when stationary, they should always dismount, even if they intend to stop only for a minute.

A reserve (iron ration) ration for horses is a most necessary requirement, and should receive attention. Patrols operating in hostile territory will not dare to give away their positions and to court capture, by requisitioning forage, and, in the larger strategical operations, it will often be impossible to spare time for foraging on an extensive scale.

Special reference has already been made to the pernicious method of heaping up marching order equipment on the cantle of the saddle, and thus making it difficult to mount and dismount. Not only is it most inconvenient to the men, but it is the wrong place to carry weight; the weight should be brought *forward*, as nearly over the fore legs as possible; consequently, the front arch is the place to carry the load, and not the cantle.

Wallets have been in many cases abolished, as if the men have them they are sure to stuff them full of unnecessary articles, and they themselves weigh something. Although small articles such as rifle buckets, surcingles, shoe cases, wallets, and bosses do not weigh much separately, a very material reduction of weight is effected in the aggregate by dispensing with them. They are not necessary; the rifle can be carried in a much lighter short

bucket, which also serves as a shoe-case (*vide* illustrations). The cornsack and cloak can conveniently be carried over the front arch; the latter should be rolled to a length of about three feet, so that it should not be too thick and so cause the rider to carry his bridle hand too high. It has been found a good plan to carry the sword on the horse's near shoulder. With the short, curved tulwar it can be carried under the flap of the saddle, but with a long or straight sword it is better to carry it perpendicularly just in front of the flap of the saddle. The top of the hilt should be in line with the highest part of the front arch, to which the scabbard is attached, and the lower end of the scabbard is attached to the stirrup iron (inside) by a small strap. The sword rides well in this position, and it is most convenient to draw, as it can be whipped out in a second, without turning the eyes away from the front and so losing dressing.

The arrangements for picquetting cavalry horses require consideration. It is sometimes said that no heel-rope is necessary; that the horses will stand well enough when only tied up by the head-rope. No doubt the majority of horses will do so when they are not too fresh or in too high condition, but before the horses come to this stage there will be a good many casualties owing to kicks and similar causes. The question is whether it is good enough to risk these casualties for a saving of about 2½ lbs. per horse! On the other hand, picquetting pegs are very awkward things to carry on the saddle, and it would be convenient to get rid of them. The artillery method of attaching horses by the head-rope to a central rope stretched between two waggons, is hardly suitable to cavalry, as the latter require to be able to picquet horses separately when employed on detached duties. Wooden pegs are bulky and difficult to carry on the horse, and are also unsuitable for use on hard ground; consequently iron pegs, if pegs are to be used at all, are generally more useful. The drawback to iron pegs is that if the horses are stampeded in camp, or break loose, the pegs are likely to damage the horses. A case occurred only a year or two ago in India, where the horses of an isolated squadron were stampeded at night by a panther, with the result that when they were recovered more than half of them were lame, or severely cut and bruised by the iron pegs to which the head and heel ropes were attached. This danger, can, however, be overcome by the following simple arrangement which has been in use in certain regiments for some years.



THE AUTHOR'S PATTERN RIFLE-CARRYING EQUIPMENT (DISMOUNTED).

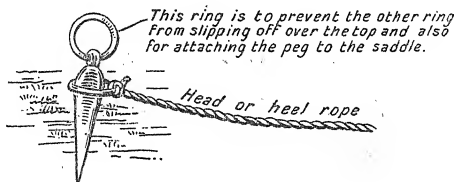
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The loose ends of head and heel-ropes should be attached to light iron rings, which will fit loosely over the pegs so that, if the horse draws his pegs, they will, directly he begins to move away, fall out of the rings.

It was the custom in some corps to secure the horses by having a shackle on the head-rope and fastening it to the fore pastern instead of to the head-stall. This arrangement makes it more difficult for the horse to break loose, as with one fore-foot off the ground, as it must be if he pulls, he cannot throw so much weight into the pull.

The pegs have a concave surface, about $2\frac{1}{2}$ inches wide near the top, which gives them a better grip of the ground. Weight $1\frac{1}{2}$ lbs. each.



If the plan of securing the horse by a shackle on the fore pastern is adopted, head-stalls can be dispensed with altogether, or made much lighter, as they will have to bear no strain. For detached duties, such as patrols or outposts, it is quite unnecessary to have any heel-rope, as there will be plenty of space for picqueting the horses, and they therefore need not be so close together that they can kick each other. It has also the advantage that in bad weather the horses can turn round with their tails to the wind.

Iron pegs may be carried (on some saddles, not on all) lying on the top of the furs, held in place by leather pockets, and attached to a D on the cantle by a small strap, or, in the author's pattern of rifle-carrying equipment, an iron peg can be carried in a pocket on the outside surface of the rifle bucket.

Probably the best solution to the question of how to secure cavalry horses when in camp is to adopt the method used by the trans-frontier horse dealers in India, viz. to dispense with the use of pegs altogether, and to bury the knotted ends of the head

and heel-ropes in holes in the ground. The holes need only to be one foot deep, and should be narrower at the top than the bottom. The loose earth is stamped in on the top of the knot with the heel of the boot. To enable this plan to be used the men must carry some sort of implement for digging the holes. It is suggested that the short hunting-knife bayonet, to which reference has been made, would meet the requirement, but if this weapon is not available an iron peg must be carried. The head-rope can be attached to the iron peg and the heel-rope buried in the ground. The iron peg can be used for digging a hole to bury the knotted end of the heel rope. A big knot at the end of the heel-rope is desirable, or it may be fastened to a bunch of grass or sticks and the whole buried together. This arrangement will at any rate only make it necessary to carry one peg instead of two.

The seats of the majority of military saddles are much too short, which makes it difficult for the men to ride well over jumps, as in them it is not as easy to sit back as in an ordinary hunting saddle. Burrs on saddles have, to a considerable extent, been done away with; they are an abomination, as they generally press on and restrict the movement of the shoulder blade, causing galls and swellings, and they are quite unnecessary.

Surcingles are also unnecessary, unless for the purpose of fastening the blanket on the horse's back in camp. The disadvantages of them are that a man cannot tighten up his girths when mounted, and they are also extra weight. The buckles of the straps underneath the seat of the saddle may with advantage be on the *outside*, close above the front arch, near the top on both sides; this arrangement avoids any danger of them touching the horse's back or withers.

It is nowadays customary to have nothing but the folded blanket under the side bars of a saddle, but this arrangement has certain disadvantages. If these blankets are used at night to put over the horses, they are certain to get wet, and covered with mud in bad weather, and, consequently, are apt to sore back the horse when again put under the saddle, especially if the men have to saddle up in the dark, as is frequently the case. It therefore seems desirable to have a felt numdah as well; to be placed next the horse's back, under the blanket. It is, of course, extra weight, but it is better than having sore backs. If this is done, it is necessary to make sure that the front arch is wide enough to admit of *both* without pinching the horse's withers.

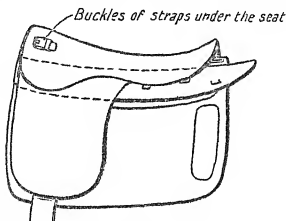


THE AUTHOR'S PATTERN RIFLE-CARRYING EQUIPMENT (DISMOUNTED).

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A new pattern military saddle has been tried, and found to answer well, with moveable side bars which automatically adapt themselves to the shape of the horse. The side bars are of wood, and the arches are hinged into the side bars in such a way that the latter can lie either more horizontally or more perpendicularly according to the shape of the horse's back. The buckles of the straps under the seat are outside instead of inside, and the saddle has a low cantle, no burrs, and a long seat.



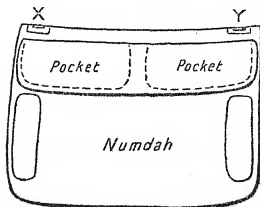
For drill order parades this saddle rests only on a felt numdah, which has a double strip, or pocket, immediately under each of the side bars. This pocket can be filled in with additional pieces of numdah, so as to throw the weight back or forwards.

There are also small double strips for knee rollers, which make riding more comfortable. The numdah is reversible, *i.e.*



either end can be put under the front arch. The portion of the numdah behind the flaps of the saddle prevents the various articles of marching order equipment from rubbing the horse.

For field service order, a blanket can also, if desired, be carried over the numdah and under the saddle. The numdah (and blanket) are attached to the saddle, and held in place, by a narrow leather strap which is attached to the crupper D of the rear arch, goes through a hole in the numdah (*vide* XY in diagram), along under the numdah, through the other hole, and is then buckled tightly on to the top of the front arch. By this arrangement neither the numdah



nor blanket can shift, or slip back, and they are held up, clear of the backbone, giving ventilation and preventing any chance of rubbing.

The weight of such a saddle, with hinges, is about $1\frac{1}{2}$ lbs. more than a similar saddle without hinges, and the numdah is also extra weight, but, by lightening the headstall and abolishing every unnecessary accessory, its total weight will not be found to be in excess of the saddles in general use.

For cavalry purposes the tripod form of mounting for machine guns is hardly satisfactory,* as it takes too long to come into action. A light galloping carriage would probably be preferable, especially as the same carriage might perhaps be made to carry the ammunition as well as the gun.

The A echelon of the first line transport should consist of *troop reserve* ammunition, entrenching tools, and signalling equipment only. In hot and waterless climates, pakhali mules, which should also carry a few canvas water troughs and buckets, may also be necessary. The B echelon of first line transport, or, as it is sometimes called, emergency baggage, should consist of blankets for the men, cooking-pots, and rations for man and horse. The *regimental reserve* of ammunition may often with advantage accompany it, as it is generally impossible to have the whole of the reserve ammunition accompanying the cavalry during actual operations.

The method of carrying the rifle by cavalry is a much debated question, but there can be little doubt that it should be carried in such a manner that if a man is thrown, or his horse escapes, he should have his rifle with him. It therefore appears desirable that it should be attached to the man. This does not necessarily mean that the man has to carry the weight of the rifle. Two different methods of carrying the rifle are now in use in certain regiments of the Indian army, in both of which the butt of the rifle is carried in a short bucket on the saddle, but the rifle is attached to the man, so that it comes away with him if he falls. The *weight* is carried by the bucket, and the rifle is kept in place by straps over the man's shoulders, attached to studs on the belt, or, in the other case, by a strap over the man's bridle arm. The movements of the man are in no way restricted. Some such method appears better than carrying the rifle in the ordinary

* I refer to the tripod mounting carried on pack saddles.



THE AUTHOR'S PATTERN RIFLE-CARRYING EQUIPMENT (DISMOUNTED).

N.B.—One hundred and sixty rounds of Ammunition are carried in the bandolier and pouches.

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bucket on the horse, and it has the further advantages that it is lighter and less expensive.

Nowadays, when the men will have to be continually dismounting to use their rifles, it is a mistake to have the butt of the rifle projecting above the saddle, as is the case with the ordinary rifle bucket, as mounting and dismounting becomes an acrobatic performance which is extremely difficult for any but a long-legged man.

The ammunition bandolier round the horse's neck is inconvenient, as the horse cannot get his head down to drink, or to graze, and ammunition should be carried on the man, not on the horse, so that it may always be to hand when wanted. A man can carry weight with least discomfort round his waist; it therefore appears desirable that he should either have a waist bandolier, in addition to the shoulder bandolier, or else have pouches on the belt.

As, in practice, it will be found almost impossible to have the *Regimental* reserve of ammunition with the troops themselves on all occasions, it is most desirable to take all precautions against the available supply of ammunition running short. The *Troop* reserve will give about 100 rounds a man (for twelve file troop), but it is possible that even this may not always be to hand when wanted. It therefore seems desirable that the men should have pockets capable of carrying an extra thirty or forty rounds, in addition to 160 rounds carried in bandolier and pouches. This extra thirty or forty rounds might be distributed from the *Regimental* reserve on occasions when heavy expenditure of ammunition is anticipated.

However desirable it may be to reduce the weight on the horses, it should not be brought about by any reduction in the amount of ammunition carried.

There are some minor matters connected with equipment which are also deserving of attention; though they are not very important, they are, nevertheless, capable of improvement. Shoulder chains glitter in the sunlight, and give the positions of the troops away. They should, for service, be covered with leather. All metal articles like sword-hilts should have khaki drill coverings, scabbards should be of leather, and buttons of leather. Aluminium canteens and water-bottles should be universally used instead of those made of heavier metal. Spurs should be short, so as not to inconvenience the men when acting on foot, and also to make

them lighter. Service cooking-pots should be of aluminium, and so arranged as to fit inside each other for convenience of transport.

Attention to all minor articles of equipment will enable a very considerable reduction of weight to be effected. Very considerable reductions have been made in some regiments, and there is no reason why similar arrangements should not be made in all corps, both British and Indian.

CHAPTER IX

THE ORGANISATION OF CAVALRY FOR WAR.

THE desirability of avoiding frittering away cavalry on minor duties, which can be performed equally well by less highly trained and less costly troops than cavalry, has been already noticed. To effect this it has been suggested that a corps of despatch riders should be instituted which should take the place of cavalry for orderly duty with staffs in the field, and that the divisional cavalry of our regular army should be replaced by mounted infantry.

Stress has been laid on the fact that it is quite impossible to improvise cavalry; it is a highly specialised arm, which cannot be quickly replaced. Remounts to be fit for cavalry work must be both thoroughly trained and in hard condition, and reserve men will rarely be fit to place direct into the ranks without endangering the cohesion of the whole. Special arrangements are therefore necessary for the supply of suitable remounts, and for the further training of reservists before rejoining the ranks of their regiments.

The advantage of making up for our deficiency in numbers by maintaining a proportionately larger number of mounted troops than other nations, has been previously insisted on.

The whole of the cavalry should be permanently kept on a war footing; every regiment should put four squadrons into the field, and should organise a dépôt on mobilisation. This arrangement necessitates a peace strength in excess of the war strength, as in the Indian cavalry, but in a modified form.

The peace establishment need only exceed the war establishment by a figure representing the average number of recruits plus the average number of sick, who would be left at the dépôt on mobilisation. The peace establishment of horses should, however, be greater than the peace establishment of men. Each

troop might be given; say, three spare horses, which would be left at the dépôt on mobilisation, and would be used for mounting reservists when called up to join the dépôt on mobilisation, and they would be available later as remounts for the field army.

It is real economy to have spare horses in all units. This arrangement enables horses which have slight injuries, or sprains, to be rested, and given a fair chance of recovering. Nothing ruins horses so much as continuing to work them when they have slight injuries, as the injury gradually increases, with the result that the animal becomes in the end permanently unsound.

By the arrangements above referred to, the reservists before proceeding on service would have a period of further training at the dépôt, longer or shorter according to circumstances. ~~Reservists~~ ^{Reservists} serving abroad should leave their dépôts at home where recruits would be trained, and sent out to them when required.

It has been previously suggested that, as an additional means of keeping a reserve supply of trained cavalry horses, it is desirable to increase the number of mounted infantry schools, and to keep them supplied with horses on which the mounted infantry may be trained, though other horses would be supplied to them on mobilisation. These mounted infantry schools might become the headquarters of the mounted infantry regiments, to which reference will be made later.

To thoroughly fulfil modern requirements it has become necessary to specialise the different branches of the service to a considerable degree, but this has been rather neglected as regards the cavalry arm. For instance, it is ridiculous to expect the same class of cavalry soldier to be equally suitable for reconnaissance as for shock action: big men on big horses will, other things being equal, ride down light men on light horses, but the big man and heavy horse will not be suitable for scouting. A scout requires to be a light, active man, and his mount should be the well-bred, wiry, and small horse, of the class which can go all day and will thrive under conditions which would soon place the larger horse *hors de combat*. When it is considered that even light cavalry such as hussars, ride about 17 stone in field service order, it is evident that there are certain duties, such as scouting and despatch riding, which cannot be performed efficiently by men riding such heavy weights; hence the necessity for specialising certain corps, and of organising our regiments suitably for the work which they will be called upon to perform. The institution of a corps of

despatch riders has been suggested, but it is also desirable to raise a small and select corps of scouts on a similar basis, in addition to our regimental scouts. General Baden-Powell's Boy Scout movement should make the raising of such a corps both easy and popular, as the boys' training should make them in some degree fitted for more extended and responsible duties when they attain manhood.

For shock action; particularly against hostile cavalry; the strength and weight of the man and horse will undoubtedly tell, and big men have a longer reach, and can use their weapons with more effect than smaller men. If heavy cavalry is to be retained; and there certainly seem good reasons for retaining a limited number of heavy regiments, it should be kept in reserve, principally for shock action, and carefully nursed until the opportunity for its employment occurs, as the class of horse on which it must be mounted has been found incapable of standing the racket and hardships of war for any length of time. As, however, the occasions when cavalry on service will use shock action will not probably be numerous, it does not seem desirable to maintain more than a very limited number of heavy regiments. Cavalry cannot be too light for general purposes; light men can ride and use their rifles as well as big men, and they will be better than heavy cavalry for the attack against hostile guns or infantry, as they will move faster, and cross the fire-swept zones more rapidly. What we want is a cavalry which is useful for all purposes, and which will not break down under the strain of war.

At the present time we have too many heavy regiments, and the light regiments are not light enough. Modern requirements seem, in fact, to necessitate a return to the old distinctions of heavy, medium, and light cavalry, except that the greater part of it should be light.

In the Household Brigade we have our heavy cavalry, and the regiments of Dragoon Guards *should be* our medium cavalry, and should not ride more than $17\frac{1}{2}$ stone in field service order, whilst all the remainder should be light cavalry, riding not over $16\frac{1}{2}$ stone. These weights represent the irreducible minimum which we ought to strive to attain.

In order to make our cavalry truly independent, and to reinforce it at the least possible cost, it has been suggested that it should be supported by mounted brigades composed of both mounted infantry and mobile riflemen carried in vehicles. It

would seem desirable to increase the strength of our cavalry brigades to four regiments each, and that a cavalry division should consist of two such cavalry brigades and a mounted brigade. There are twenty-eight regiments of cavalry of the line, half of which are serving abroad. The fourteen regiments serving in the United Kingdom, plus the special reserve regiments of Irish Horse, would give us four strong cavalry brigades, and we should thus be able to put a cavalry corps of two divisions into the field without calling on the Household Cavalry, which would constitute a further reserve to be utilised on special occasions.

The organisation above suggested would give each commander as large a force as he could handle with advantage in the field, and it would also be economical in the number of staffs required. There would be no necessity for having any divisional or corps troops, which would be an advantage, as on service such troops are "no man's child," and are consequently often attached to brigades as a means of convenience as regards command. This system of organisation could be applied equally well to our forces in India.

In India there are thirty-nine regiments of Indian cavalry, including the Guides Cavalry, nine regiments of British cavalry, and eleven horse artillery batteries. With one extra battery of horse artillery, the above force could be organised in twelve brigades of four regiments each; or six divisions. These divisions might further be organised into two corps of three divisions each, each corps commanded by an Inspector-General of cavalry. This would only necessitate the grouping of brigades and divisions, and the appointment of two Inspectors-General instead of one—one for the North and one for the Centre and South of India. These officers should not only be Inspectors-General, but they should also command their corps in war. Should it be undesirable to denude India of the whole of its cavalry in case of a war beyond the limits of that country, it would be quite simple to leave one division (or brigade) of each corps behind, and to take the field with corps of two divisions each, as in the scheme suggested for the home army.

The divisions in India might take the field with either three or four brigades, one of which would be a mounted brigade, and the remainder cavalry. There appears to be no necessity to keep up divisional staffs in peace time, as the brigade is the largest tactical unit which can be handled by drill methods. It is

immaterial whether the brigades are organised into divisions or corps: a division might contain any number of brigades from three to four, or if the number of brigades exceeds four it might be classed as a cavalry corps. No other staffs would thus be required, except the brigade staff and the staff of the Inspector-General, who should be the divisional or corps commander as the case may be. It will be remembered that it has been recommended that a brigade should consist of *four* regiments, not three.

The divisional cavalry for the Indian Army might be supplied by the Imperial service troops, which could be reinforced, if desired, by regular regiments supplied by the divisions which, as ~~above~~ suggested, might be left behind in case of war outside of India.

If one division or brigade of each cavalry corps were retained in India, it would only be necessary to arrange for the formation of four mounted brigades to complete the four divisions going on service. There should be no great difficulty in doing this; our mounted infantry schools would have to be increased in number, and to be formed into the headquarters of mounted infantry regiments. The men could be supplied by volunteers from all regiments, and the vacancies thus caused be filled up on mobilisation by reservists.

As it would be desirable to keep up these mounted brigades on a permanent footing, the peace strength of infantry regiments would be slightly below the war strength, but there would be no harm in that, and the number of men required for these four mounted brigades would be insignificant when divided amongst all the regiments in India.

The Imperial service infantry might replace any regular regiments which might be selected for employment as mobile riflemen with the cavalry divisions.

Mounted brigades should consist of two regiments of mounted infantry, a battalion of mobile riflemen, a field troop Royal Engineers, and a battery of artillery, either horse or field. Of the eleven horse batteries in India, eight would be required to complete each cavalry brigade going on service (four divisions), and the remaining three might be employed with the mounted brigades. One extra battery would be required. Under this arrangement the non-mobilised cavalry brigades would not have horse batteries attached to them. It is, however, doubtful

whether it would not be better to have field batteries with the mounted brigades, if such batteries could be made available, as the heavier guns would be useful for supporting the attacks on villages, woods, and similar positions held by the enemy. The gunners of these field batteries might be mounted as in the horse batteries.

In case of necessity a battalion of mounted infantry could thus be attached to each of the cavalry brigades. The battalion of mobile riflemen might be partly carried in vehicles of the pontoon type, but lighter, so that the vehicles could be used when required as a light bridging train. It is unnecessary to go into this scheme in greater detail; it is evidently feasible, and would not cost very much. The chief extra expense would be the upkeep of a larger number of horses, which is an undeniable necessity if we are to be ready for war.

It will, no doubt, be said that these mobile riflemen would be a drag on the movements of the cavalry divisions, as they would not have the same degree of mobility as the remainder, on account of the vehicles being more or less tied to the roads. It should, however, be remembered that some part of the cavalry division must be utilised for the defence of the trains and baggage; this duty could be better performed by infantry than by cavalry, and the latter would thereby be available for its legitimate duties at the front.

There would be occasions when the cavalry would wish to safeguard its line of retreat by holding defiles in its rear, and for the adequate protection of its cantonments at night the infantry would be most useful, and it would save horseflesh to an enormous extent by avoiding the necessity of many horses being required for outpost duty. As a matter of fact, if the mobile riflemen were carried in suitable vehicles, there is no reason why they should not be able to go anywhere the artillery can go, especially as the men can quickly get out when crossing bad ground, and, if necessary, assist the vehicles to cross obstacles.

It would be most desirable to keep these brigades up on a permanent footing, so that they would be able to take part with the cavalry in divisional and brigade manœuvres, thus giving the leaders the opportunity of practice in handling their commands. The cavalry division would be enormously strengthened by the addition of a mounted brigade constituted as above, and this organisation would tend to impress cavalry leaders with the

desirability of combining fire action and shock action to a far greater degree than is the case at present.

The cavalry division should be self-contained in every detail : it should have its own supply and ammunition columns, as well as the necessary complement of engineers, telegraphists, signallers, cyclists, motor-cars, airships, wireless telegraph and telephone, and bridging troops.

The transport of the cavalry division should be specially organised so as to obtain the highest possible degree of mobility. A mixed mobile force of the nature indicated, especially if well supplied with machine guns, should have a great advantage over a force composed almost entirely of cavalry, and should be able to hold its own in every situation as an independent unit. It would be a powerful weapon in the hands of a commander who knew how to use it.

CHAPTER X

CONCLUSIONS

CONSIDERING the matters to which reference has been made in the preceding pages, one must feel that there are still many points in which our cavalry is hardly up to the standard of efficiency which is desirable for war. Our standard must necessarily be high; nothing short of the best attainable should satisfy us.

Our numerical weakness, compared to the cavalries of the Continental Powers, make it all the more incumbent on us to strive to make our mounted forces more efficient, and organically stronger, than the cavalries of other nations.

As regards training, individual excellence in handling sword and lance is capable of being much improved, and higher and more systematic instruction in reconnaissance is desirable. The training of cavalry should not be specialised in any one direction, but it should be prepared in equal measure for any and all of the duties which may fall to its lot in war.

Shock tactics and fire tactics should be put on to an equal footing, and the necessity of combining the two insisted on.

Special attention should be paid to the higher military education of all cavalry officers, even of the most junior, and, in order to have cavalry leaders and commanders who have some experience in commanding large bodies, it is absolutely necessary to work cavalry in peace time in larger masses, or, at all events, to utilise to the utmost such means as we have at our disposal for working on a more extended scale.

The equipment of our cavalry is capable of improvement in many minor matters, and it is important to carry out to the fullest

extent any measures which will tend to reduce the weight to be carried by the horses, and to equip men who are required to perform special duties in a suitable manner.

Arrangements should be made to increase the amount of ammunition carried on the persons of the men, and to abolish old-fashioned, and inconvenient, methods of carrying marching order equipment and weapons. The early and universal distribution of the wireless telegraph is a most pressing necessity, and admits of no delay.

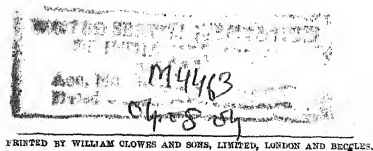
As regards organisation, the question of the supply of remounts to the army in the field is urgent. If a supply of suitable animals, thoroughly trained and conditioned, is available, the cavalry will be able to play its part, and to assert itself, but, if not, it will be compelled, after the first few engagements, to fall back on to mounted infantry tactics, and to adopt an altogether inferior rôle. To make up for our numerical inferiority, we should adopt all possible measures to prevent our cavalry being frittered away on duties which can be equally well performed by less highly trained and less costly troops, and we should reinforce our cavalry by other mobile troops, thus giving them a thoroughly independent organisation, and putting them in a position to act boldly on the offensive in carrying out the important duties that will fall to their lot in war.

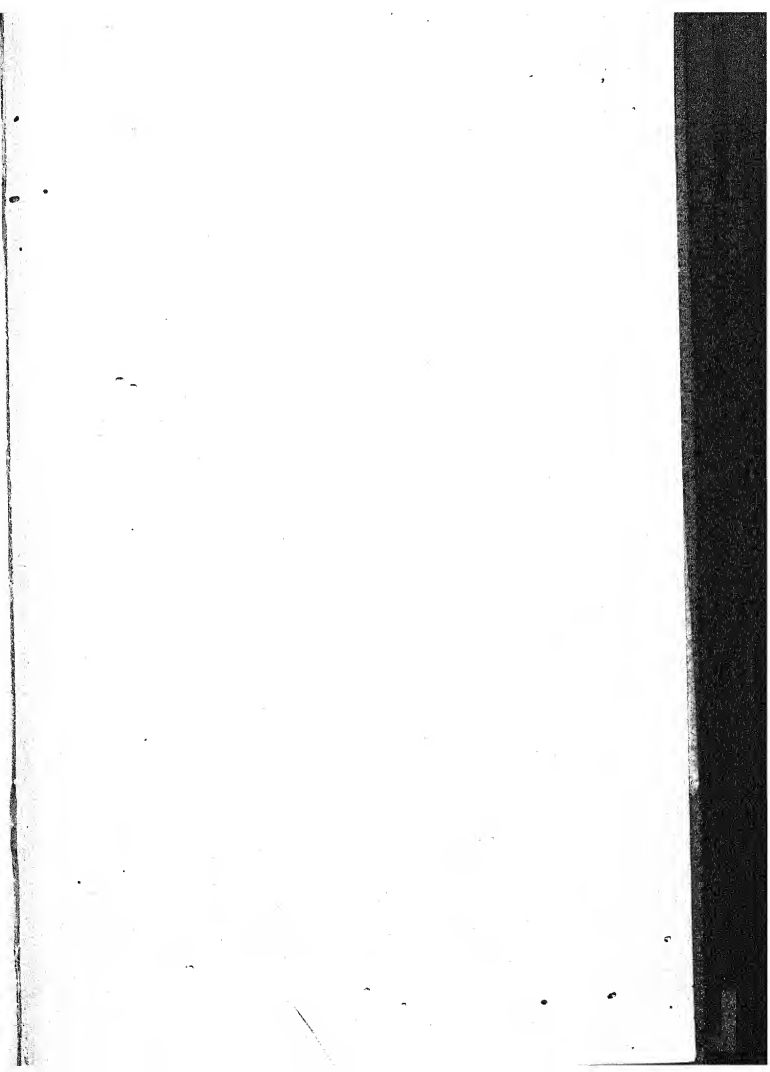
By the scheme outlined in the last chapter, we should be able to put in the field a mobile force, consisting mostly of cavalry, which would in some measure give us the cavalry masses which are necessary for the achievement of great results; unless we can put into the field some really considerable force, it is useless to train our cavalry for the higher and more important duties which cavalry is capable of performing in war, because these duties cannot be carried out by weak detachments with any prospect of success. Small forces of cavalry can only be independent in the sense that they are isolated, but not in the sense that they are in sufficient force, and so organised, as to be able to hold their own, and to shift for themselves in all situations.

In the event of a great war, the home and Indian armies together would, exclusive of such troops as would probably have to be left in India, be able to put six or seven strong cavalry divisions into the field, and this force would no doubt be very considerably augmented by mounted troops from our self-governing colonies beyond the seas.

We undoubtedly have the material to hand ; men who take naturally to horsemanship, the best breeds of horses in the world, and, last but not least, the wealth which is capable of maintaining a cavalry force which should be second to none, and which should be the terror of the enemy and the glory of the nation.

THE END







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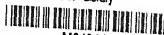
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